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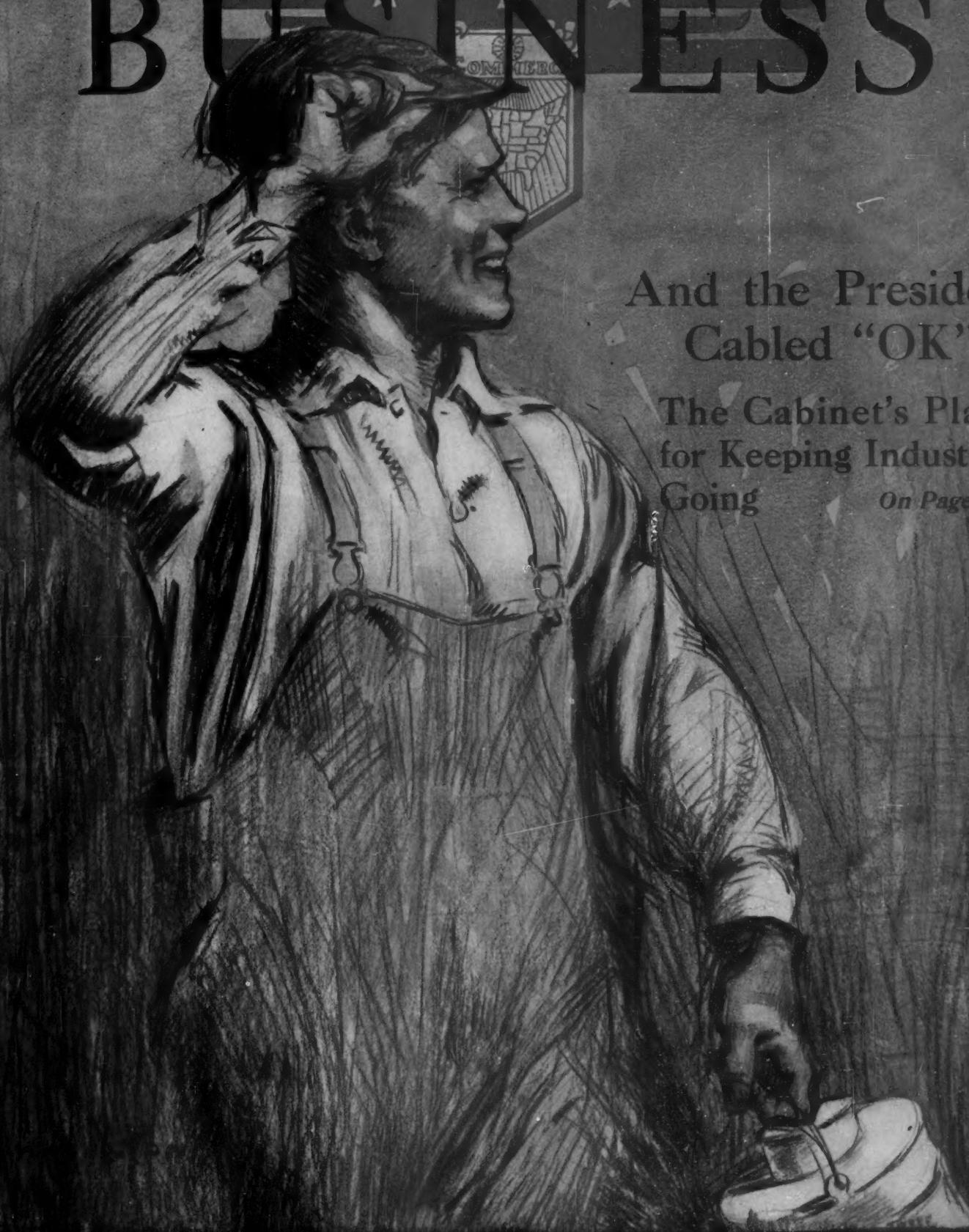
March, 1919

25 Cents

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THE

NATION'S BUSINESS



And the President
Cabled "OK"

The Cabinet's Plan
for Keeping Industry
Going

On Page 20

United States Tires
are Good Tires

"Royal Cord"
One of the five

A Titan Among Tires

The 'Royal Cord' is super-strong. It has more than enough strength in the carcass. More than enough thickness in the side wall. More than enough toughness in the tread.

The tire structure is built up of powerful, sinewy cords—tens of thousands of them in many layers. Each adds its individual strength to the tremendous sum-total of the tire as a whole.

The layers of cords are placed diagonally in opposite directions. Each cord and each layer has free play—entirely unrestricted by cross-weave. Also, cords and layers are impregnated with live, springy rubber.

So, in addition to giant strength, there is about the 'Royal Cord' an aliveness and responsiveness that is amazing.

The 'Royal Cord' is one of five distinctive United States Tires—all good tires—all built with the surplus strength that means long life and lowest cost per mile.

No matter what type of car you drive, or what kind of roads you travel, there are United States Tires that will exactly meet your needs.

Also Tires for Motor Trucks
Motorcycles, Bicycles, and Airplanes.



LEADERSHIP!

Your Reward for Readiness



Farms, factories, mines and furnaces must produce as well for peace as for war. Production is the key to prosperity.

U. S. DEPT. OF LABOR
W. B. Wilson, Secretary.



THIS trade-mark pledges to all clients of L. V. Estes, Incorporated, an industrial engineering service consistent with the Estes reputation for leadership and record of results.

THE END of one race is but the beginning of the next. Leadership invites challengers.

No industrial organization can rest on its laurels any more than can the athlete. Leaders become losers unless they are always prepared to defend their place with greater strides than ever.

In manufacturing concerns, needless overhead is excess weight—a menace to fitness. Lack of co-ordination between departments deters continued success.

The brain in the executive office must co-operate completely with the hands in the shops. Output per man must be at the maximum—wastes of time, labor and material must be at the minimum.

L. V. Estes, Incorporated, has helped scores of worthy firms to attain and maintain leadership. Estes Service, rendered by over forty experienced engineers under a unique system of supervision, can show you how to meet new conditions, new emergencies and the repeated challenges of competition.

A BOOK FOR EXECUTIVES—"Higher Efficiency," a 24-page illustrated book, will be sent free on written request of an executive. No obligation is incurred.

L. V. ESTES INCORPORATED
INDUSTRIAL ENGINEERS

1826 McCormick Building, Chicago, Ill.

ESTES SERVICE

The Solution of Industrial Problems

Williams' Superior Drop-Forgings and Drop-Forged Tools

IN every line of human endeavor there is always one name that stands out preeminently; never as the result of accident or chance, but of years of conscientious effort.

For many years the name of J. H. Williams & Co. has stood for *Superior* Drop-Forgings and Drop-Forged Tools, the best that nearly half a century of experience, the employment of the most expert technical skill, adequate modern equipment and progressive methods have made possible.

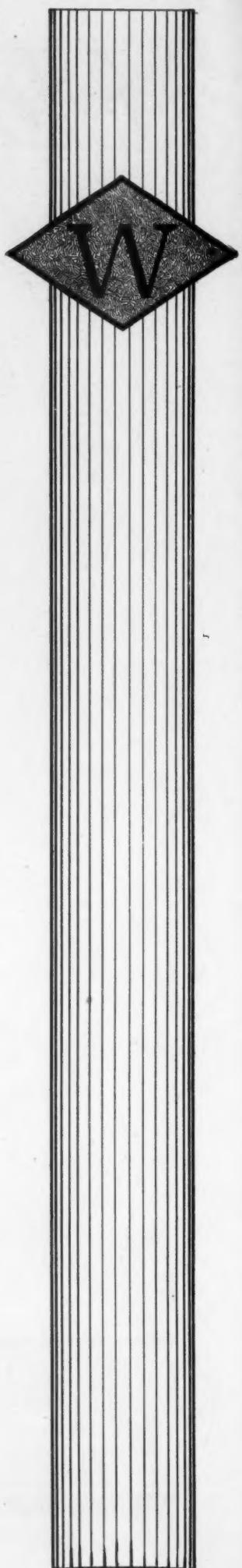
Our two complete plants, at Brooklyn and Buffalo, N. Y., serving Eastern and Western territory respectively, insure quick delivery, and reduce transportation delays to a minimum. They are at your command; inquiries regarding special drop-forgings are solicited.

We make and carry regularly in stock many Standard lines of Drop-Forged Machinists' Tools. Our *Superior* Drop-Forged Wrenches, Tool Holders, Lathe Dogs, Clamps, Eye Bolts, Hoist Hooks, Chain Pipe Wrenches and Vises, etc., etc., are designed and manufactured to meet the most exacting demands of severe service. Marketed under our trade-marks "Vulcan," and  and "Agrippa," they are recognized as standard and have established a world-wide repute for efficiency and reliability. Let us send you a pocket catalog.

J. H. Williams & Co.

"The Drop-Forging People"

24 Richards Street, Brooklyn, N. Y.
Plants: Brooklyn and Buffalo, N. Y.





Richard E. Raseman, Architect, Detroit, designed the modern foundry building shown above

Fenestra sidewall and monitor sash bring daylight and fresh air to the new plant of the Swedish Crucible Steel Company, Detroit, as well as draw off smoke and gases. The old foundry of this concern is shown in the insert

The Symbol of Modern Industry

THE American Workman, by right of the world wide opportunity and responsibility now his, demands surroundings which shall increase, not retard, his efforts.

He knows that conditions and methods in the factory with dark, gloomy walls and small inflammable wooden windows are apt to be unhealthful, inefficient and old fashioned.

He likes to work in the bright, business-like modern factory with its walls of glass and steel.

Fenestra window walls, because they mean happier, healthier, more productive work-rooms, have come to be the symbol of modern industry in buildings both large and small.

Employers and employees regard them not merely as conveyors of daylight and fresh air, but as evidence of all the wholesome surroundings which develop steady satisfied producers and insure the quality and quantity of their work. Fenestra windows have nation wide distribution.

Detroit Steel Products Company, 2303 East Grand Boulevard, Detroit, Mich.

Fenestra
SOLID STEEL WINDOWS

74th ANNUAL REPORT

New York Life Insurance Company

DARWIN P. KINGSLEY, President

Influenza, we are told, up to January 1, 1919, had already killed as many young and vigorous persons in the world generally as were killed by bullets and disease in four and a-half years of the war.

The mortality of the Company up to the outbreak of influenza promised to be, in 1918, about 61% of the mortality provided for in the premiums; it was actually 95% of the expected. If this epidemic persists during 1919 dividends may be reduced in 1920. They remain substantially unchanged in 1919. But neither war nor influenza can make any material difference to members of this Company, because as against such startling incidents this Company long since made abundant provision.

From this there are two fair deductions:

First—INSURE—there are just as many and just as sound reasons for insuring your life during days of peace as there are for insuring during times of war.

Second—Insure in companies that have aimed above all things to achieve safety. In these days SAFETY sounds better than CHEAPNESS.

The New Business of the year, chiefly from the United States and Canada, was over.....	\$340,000,000
<i>the largest year's business in the Company's history.</i>	
The Company bought so many Liberty Bonds during the year that it was obliged to borrow from the New York banks. The statement shows, on that account, Bills Payable for over.....	22,800,000
On December 31, 1918, the Company owned at par in Liberty Bonds.....	70,000,000
And in the Bonds of Allied Countries issued to finance the war.....	30,000,000

BALANCE SHEET, JANUARY 1, 1919

INCOME	DISBURSEMENTS
For Insurance and Annuities.....	\$110,138,795
Interest and Rent.....	41,500,877
Borrowed Money.....	24,000,000
Other Income.....	3,246,707
Total.....	\$178,886,379
ASSETS	LIABILITIES
Real Estate.....	\$ 13,449,600
Loans—on Mortgage, Policies and Collateral.....	321,887,157
Bonds and Stock.....	609,717,289
All other Assets.....	50,033,239
Total.....	\$995,087,285

Policies in force January 1, 1919 1,360,433
 Insurance in force January 1, 1919 \$2,838,829,802

Setting a Candle to Catch a Thief

OUTSIDE air that filters through the brick-enclosing walls of boilers, costs industrial America many thousands of dollars each year because such leakage "cools" the fire, kills draft and therefore wastes coal to the extent of thousands of tons in the national aggregate.

Yet, just as the detection of such leaks is easy (see note under picture), so is the remedy simple; but it is simple largely through the pioneer work of Johns-Manville in its practical contributions to boiler-furnace improvement.

Through a complete line of products listed below, Johns-Manville can assure plants of new standards of heat saving in the boiler-room; standards that met and satisfied the Government during the coal crisis just past, when tons of fuel were saved and many hours of shut-downs averted—at a consequent increase in factory production.

Seldom has conservation been better served by Johns-Manville than in this branch of its service.

And it can be predicted that the products listed below, and the expert knowledge of their application, will be of as great service to the nation in this present period of post-war readjustment as they were during the war.

Because to the progressive plant, conservation has become permanently a national obligation, as well as a business expedient.

H. W. JOHNS-MANVILLE CO.
New York City
10 Factories—Branches in 63 Large Cities

These Johns-Manville Products
save fuel in boiler-rooms:

High Temperature (Refractory)

Cements for boiler settings.

*Aslite Boiler Wall Coating for
boiler wall exteriors.*

Monolithic Baffle Walls—tight,
durable, easy to install; prevent
short circuiting of hot gases.

Asbestos Sheets and Blocks for
insulating hot surfaces; *Insulating
Cements.*

Heat Insulations for steam and
hot water piping.

Steam Traps.

Seat Ring Packing—eliminates un-
necessary friction between rod
or plunger and packing.



Through—
Asbestos
and its allied products

INSULATION
that keeps the heat where it belongs
CEMENTS
that make boiler walls leak-proof
ROOFINGS
that cut down fire risks
PACKINGS
that save power waste
LININGS
that make brakes safe
FIRE
PREVENTION
PRODUCTS



A WOODEN frame, over which is fastened a square of cardboard having a small aperture at its center, is pressed against a boiler wall and the edges temporarily but completely sealed by some plastic material. It is obvious that any leakage in the part of the boiler wall covered by this frame, will immediately be detected by the inrush of air at the small aperture in the center of the cardboard, consequently, a candle flame held to this aperture will be sucked inward, thus immediately revealing the fact that there is an infiltration of air through the boiler wall, which means fuel waste.

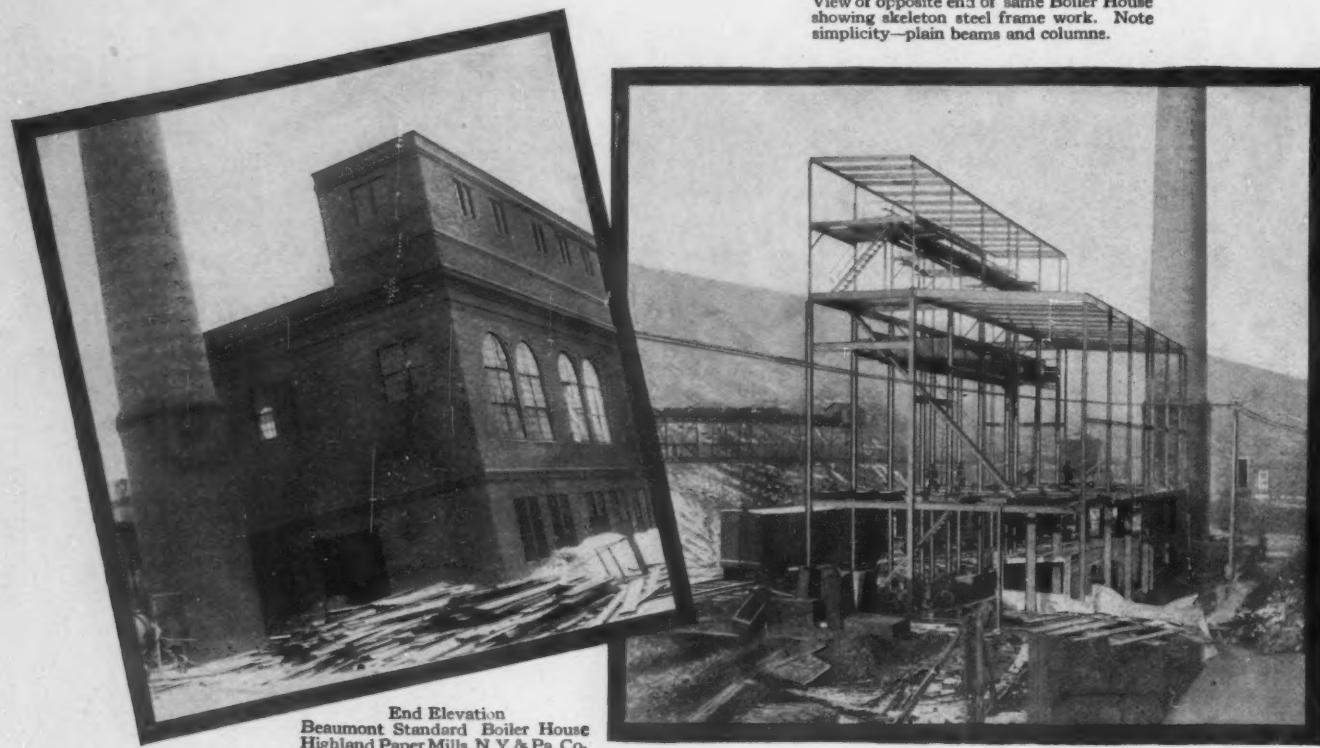
Thousands of tons of coal have been saved by preventing boiler wall leakage and by similar corrective measures at and around the boiler furnace.

A complete service in this department of engineering was one of the important contributions made by Johns-Manville during the fuel crisis.

JOHNS MANVILLE

Serves in Conservation

View of opposite end of same Boiler House showing skeleton steel frame work. Note simplicity—plain beams and columns.



End Elevation
Beaumont Standard Boiler House
Highland Paper Mills, N.Y. & Pa. Co.
Johnsonburg, Pa.

Another Step In Standardization

For the past twenty-five years the R. H. Beaumont Company has specialized on the design and construction of boiler house coal and ash handling equipment, including bunkers, structural steel, etc.—each contract being a tailor-made job to meet the specific requirements of that particular case.

In checking over plans of all the contracts handled during this quarter century, it was found that with very minute changes, less than a half dozen types of boiler house design would have answered the purpose with absolute satisfaction in about ninety-five cases out of every hundred.

This fact proved to the Beaumont engineers that standardization of boiler house construction was in every way as practical as with automobiles, trucks, shoes, ready-made clothing, factory buildings, ships, etc.

One Contract—One Responsibility—We take the contract for the boiler house **complete**—from the inception of the plans to the finished job delivered in operating order with steam in the pipes. No "Passing the buck" from engineer to contractor or from boiler manufacturer to stoker builder. The equipment used is selected because of its reliability and adaptability to your requirements and the building is designed to fit this equipment—light, ventilation, architectural appearance, economy of operation and future extension all being provided for.

Beaumont Pre-Construction—Standardization permits us to purchase in large quantities, and keep material in stock. It also dispenses with the usual months of planning and drafting. This results in a very large saving of both time and money over the old "tailor-made" method.

A Definite Price in Advance—Frequent repetition of the same operation and lump sum purchasing places costs on a definite basis with all guess work eliminated.

This standardization plan represents such a radical and economical departure from the "tailor-made" method of boiler house construction and equipment that all those who make decisions on matters of this kind should be familiar with its advantages. Send for the Beaumont book "Standardized Boiler Houses."

Beaumont
ONE CONTRACT
ONE RESPONSIBILITY

Beaumont Company specializes only on boiler houses and does not enter into any other kinds of engineering and construction work. It seems conservative, therefore, to claim that their organization is better qualified in size, knowledge and experience for this one class of work than any other in the country.

R·H· BEAUMONT CO.
STANDARDIZED BOILER HOUSES
PHILADELPHIA



Outage Reduced to a Minimum

A big gasoline company, operating many tank cars, made a scientific investigation of the loss from outage. It was found that the average outage from *standard* tank cars, for sixty trips, was 152 gallons. A General American *Insulated* Tank Car, under the same conditions, reduced the outage to 48.7 gallons.

Experts have pronounced this car "super-safe." It has the formal approval of the Bureau of Explosives and the Master Car Builders Association.

1898—Twenty-one Years of Service—1919

Unfailing, intelligent service has been rendered its patrons for more than a score of years by the General American Tank Car Corporation. Pioneers in the early days of tank car building, we are still leading, as the achievement represented in the insulated car shows.

We build tank cars, standard and special, for purchase and lease, designed for any purpose, and are glad to furnish practical advice to concerns interested. Write for information.

General American Tank Car Corporation

Builders

GENERAL OFFICES:

Harris Trust Building, Chicago

Lessors



Sales Offices:

17 Battery Place, New York
24 California Street,
San Francisco

Plants at

Warren, Ohio
East Chicago, Ind.
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ATKINS
SILVER STEEL
SAWS and TOOLS
A Perfect Saw for every Purpose

Finest on Earth

We make a complete line of Silver Steel Saws, Saw Tools, Machine Knives and Mill Specialties. Your request for literature descriptive of our products will receive prompt attention. Write today to the nearest branch named below.

PERFECTION
N. 5

No. 749

You can purchase Atkins products from all distributors in the United States, Canada, Great Britain and France; in fact in all civilized countries. If they do not have in stock the particular saw or machine required, they will get it for you.

If you have difficulty in obtaining Atkins Saws and other products through your regular service, write

E. C. ATKINS & COMPANY, INC.
Established 1857

Home Office and Factory: INDIANAPOLIS, INDIANA

Canadian Factory: HAMILTON, ONTARIO

Machine Knife Factory: LANCASTER, N. Y.

Branches carrying complete stocks in all large distributing centers as follows:

ATLANTA	MEMPHIS	NEW ORLEANS	PORLAND, ORE.	SEATTLE	SYDNEY, N. S. W.
CHEAGO	MINNEAPOLIS	NEW YORK CITY	SAN FRANCISCO	VANCOUVER, B. C.	PARIS, FRANCE

Shall Half the Potatoes Grown Be Lost?

By Harvey S. Firestone
President, Firestone Tire & Rubber Co.

HERBERT HOOVER, speaking at a meeting of the Highways Transport Committee, said that 40% to 60% of our potatoes are lost annually between the producer and the market. Fifty per cent of the perishables raised on the farm never reach the market.

In the use of trucks by farmers Mr. Hoover sees the ultimate adjustment of the food question. The farm motor truck offers this service:

1. Releases land growing horse-feed to grow food for human consumption.
2. Delivers promptly the products of the farm to market, making available crops otherwise lost; by immediate movement of perishables reduces waste due to decay in transit.
3. By conserving time en route it conserves man power.
4. Increases radius of land suitable for market gardening around cities.

5. Effects 5% to 8% saving in shrinkage of cattle driven to market.
6. Carries back to the farm industrial products of the town and city which would otherwise increase the railroads' loss on unprofitable short-haul freight.

"Ship by truck" is not a new thought to the farmer. Thousands are already making the truck a valuable element of their farming business.

Reports from different parts of the country bring out such instances as these:

1. Outbound motor-truck shipments from one farm in one season: 100 live hogs, 200 live sheep, 800 bushels of wheat. Return shipments: 80 tons of lime, 65 tons of building cement, 70 tons of coal.
2. Trip from farm to town made in three hours with truck. Time required by team two days.
3. 1,300 head of hogs brought to one live stock market in one day by motor trucks.
4. 14 motor-truck routes, aggregating 1,192 miles, daily operating from one eastern city into the rural districts, serving the small town and the farmer.

"Ship By Truck"

Let us carry this slogan to every farmer we know—to everyone we know who can influence this great army of food producers. For we, every one of us, benefit when the farmer reduces shipping cost and speeds up the delivery of perishables. Your table and mine will be supplied with better food, procured at a lower cost, with an actually greater profit to the farmer who produced it.

"Ship by truck" carries universal benefit. It is a factor in national economy and national gain.

"Ship by truck."

Think it; talk it. Aid in this movement for better roads and better transportation. For you, individually, will share in the benefits.

"Ship by truck."

Half The Truck Tonnage
of America is Carried on
Firestone TIRES



Will You Be Ready to Help Fill the Ships?

Foreign trade we must have hereafter, to keep our factories going. Those of us who sell our products at home must be depended upon to supply the exporter who is to fight our battles for us in foreign markets. In the race with world competition, American goods can carry no handicap of extravagant cost. They must be produced and shipped economically or not at all. The concern that fails in this, will fail altogether—excessive costs must go.

**H. & D. Corrugated Fibre
Shipping Boxes**

Will aid you in this crisis, by cutting down your shipping expense materially. They save 15% to 25% in box cost, 80% to 90% in storage space and 50% or more in the labor of handling and packing. The moment you install this system your Packing Department will begin to show you these actual savings in dollars and cents and, in addition, you will find your freight charges reduced and your damage claims from customers eliminated.

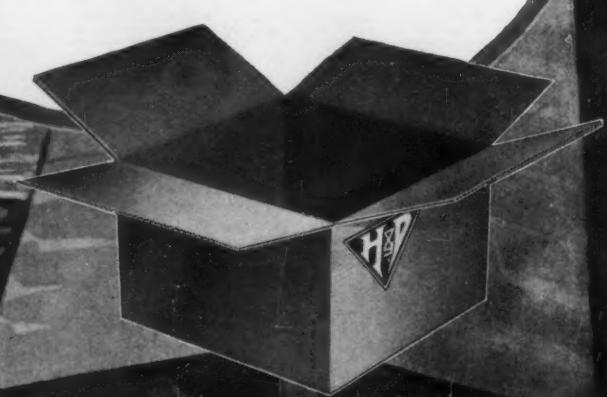
Write (on your firm letterhead, please) for the forty pages of facts contained in our free booklet,

"HOW TO PACK IT"

When you see the book you will read it.

The Hinde & Dauch Paper Company
304 Water Street, Sandusky, Ohio

Canadian Trade, Address Toronto



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Who Is Your Neighbor?

A Foreword by the Editor

VERILY business has brought the uttermost ends of the earth to our back doors and with them their social and political problems. Some of us may have sympathized with the man who said the other day he was sick and tired of this European mess. He wished President Wilson would settle it up so that we could once more attend to our own affairs at home. But we doubt if that delightful state of exclusive bliss will ever return. The war served to hasten a situation that commerce had slowly but surely been bringing about.

Consider a middle western farmer. He may wonder why all this bother about foreign trade and a merchant marine. As a matter of fact the daily activities of the Antipodes have come very close home to him. His boy who felled the oak in the wood lot sends the staves to Argentina and France; in return Patagonian wool furnishes him a new suit of clothes and Limoges gives his mother her best piece of china.

The father himself grumbling about the price he pays for a gallon of good varnish is meeting the cost of troubles with the native New Zealanders who dig kauri gum from the earth. The price his wife pays for currants has a part in the governmental affairs of Greece. The glass beads with which his children play were made in Venice.

The carpet on the parlor floor came at a high price because bandits in Western China cut off the supply of sun-dried wool. And what of the linoleum on the kitchen floor? American ingenuity had combined linseed from Argentina, cork from Spain and jute from the Philippines. Even the canned fruit on the supper table was possible because of tin mined by peons in Bolivia, or by coolies on the Malay Peninsula.

There is a doubt if we shall ever again be able to ignore the political and social problems of our international neighbors and ask, "Am I my brother's keeper?"

THE NATION'S BUSINESS

Published Monthly by the Chamber of Commerce of the United States, Washington, D. C.

MERLE THORPE, Editor

As the official magazine of the National Chamber, this publication carries authoritative notices and articles in regard to the activities of the Chamber, its Board of Directors and Committees. But in all other respects, the Chamber is not responsible for the contents of the article or for the opinions to which expression is given.

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More than Half a Million square feet of *Barrett Specification Roofs* protect the great Remington Arms Plant

THE type of roof to be used on a huge job like this cannot be decided on the basis of individual preference. Nor can experimenting be tolerated. For the investment is too large and the consequences of a mistake are too serious. When architects and engineers face a roofing job like this they have to get right down to proved facts and figures. They have to be absolutely sure on four points.

First. That from start to finish they will get just the kind of a roof they specify, with no chance for "skimping" or substituting inferior materials.

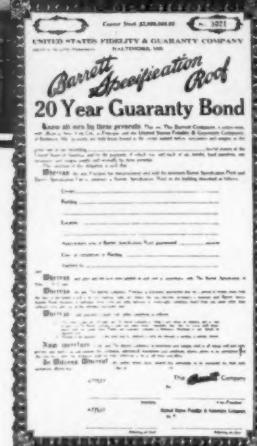
Second. That the manufacturer of the roofing materials is thoroughly reliable, and has had long and successful experience in the roofing business.

Third. That the roof will positively be trouble-proof and free from maintenance expense for a long period of years.

Fourth. That it shall be the most economical roof possible to obtain, not as to first cost, but, what is of greater importance, as to *cost per year of service*.

Because Barrett Specification Roofs meet *all* of these requirements better than any other type of roof, they were selected to cover these great buildings.

Today the *standard* covering for permanent buildings is a Barrett Specification Roof. It takes the base rate of insurance. It costs less per year of service than any other type of permanent roof. It is guaranteed for 20 years.



This is the bond that guarantees your roof for 20 years

The 20-Year Guaranty

A 20-YEAR Surety Bond is now offered on all Barrett Specification Roofs of fifty squares and over and in all cities of 25,000 population and more, and in smaller places where our Inspection Service is available.

This Surety Bond exempts the owner from all expense for repairs or up-keep on his roof for 20 years. It is issued by the U. S. Fidelity and Guaranty Co. of Baltimore, one of the largest Surety Companies in America.

Our only requirements are that The Barrett Specification dated May 1, 1916, shall be strictly followed and that the roofing contractor shall be approved by us and his work subject to our inspection.

Thus, in spite of the fact that we do not build roofs ourselves, we are put in a position where we can actually *guarantee* the delivery of the long years of service which Barrett roofs are capable of giving.

Barrett Floor and Foundation Water-proofing

Barrett materials were used not only on the roofs of the buildings of this great plant, but also to water-proof the floors and foundations; 264,600 square feet of Tar-Rak Flooring; 966,000 square feet of two-ply floor-water-proofing; 126,800 square feet of foundation-water-proofing.

New York Youngstown Peoria Minneapolis
Cleveland Chicago Toledo Atlanta
New Orleans Cincinnati Philadelphia Columbus
Seattle Kansas City Pittsburgh Duluth
Salt Lake City Elizabeth St. Louis Birmingham
THE BARRETT COMPANY, Limited: Montreal Toronto

The *Barrett* Company

Nashville Dallas Johnstown Buffalo
Winnipeg Vancouver St. John, N. B.

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Milwaukee Boston
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Buffalo Lebanon
Vancouver St. John, N. B.
Halifax, N. S. Sydney, N. S.



THE NATION'S BUSINESS

A Magazine for

Commerce

Business Men

VOLUME 7, NUMBER 3

WASHINGTON, MARCH, 1919

Making \$15-A-Day Men

A plan promoted by government, business, and labor, designed to reduce unemployment and add a billion dollars yearly to our production

By HERBERT E. MILES

Chief of Training, United States Training Service

LAST week in one small district of a great western manufacturing state there were 9,000 idle mechanics, mostly from munition plants. The railroads of that state, as elsewhere, were badly out of shape and 900 machinists were wanted for locomotive repairs. The United States Employment Service could find only 210 machinists out of the 9,000 idle men.

It is estimated that the railroads of the country want upwards of 5,000 boilermakers. Although there are very many idle boilermakers, the Employment Service cannot recommend to the railroads one in twenty of them. Some time ago 2,500 machinists were laid off in a city in central New York at a time when factories in the immediate vicinity wanted great numbers of machinists for work of a different type, and scarcely ten per cent of the 2,500 idle mechanics could qualify.

These statements can be repeated without end and for manufacturing cities everywhere. In Germany, Belgium, and France, eighty-five per cent of the machinists are broadly trained.

In one of our great eastern cities of 600,000 people there is not an American-born interior decorator who can decorate the interior of her best buildings. The men who can do that are foreign born and foreign trained. In other words, if a decorator is wanted at \$15 a day the money is given a foreigner; if a \$5 man is wanted an American may do.

Not only are great numbers of workers unable to take any of the tens of thousands of vacant places, but a very great percentage of the workers in our factories are so deficient in their production that it is painful to state the facts.

"The United States Training Service recently has gathered and analyzed facts which tend to show that three out of every four workers contribute much less than the average production of the four, and that this joint average of the three generally falls below thirty-five per cent of a fair day's output.

"The manufacturers' census of 1914 reported a total of above 7,000,000 persons as then employed in the factories of the United States. The number in like employment at the beginning of this year can hardly be less than 10,000,000. If three-fourths of this great multitude is producing at the rate of only about a third of their potential capacity, the extent of the loss to our national efficiency is immeasurable."

The Price of Poor Work

THE above quotation is from Bulletin No. 8 of the U. S. Training Service, of U. S. Department of Labor, Charles T. Clayton, Director. The investigation was under war-time conditions, and the statement that three-fourths of the workers in American factories fall below thirty-five per cent of a fair day's output might be corrected now to something like forty per cent because of the discharge of many of the poorest men; but this may well give us shame rather than satisfaction, because these poor workers are on the street with no income for themselves and their dependents and are food for vicious propaganda.

Think of 7,000,000 factory workers with such wages as never before were dreamed of, producing less than half of a fair day's output, and of millions more among us, or returning

from abroad, who are no better qualified. They were quickly trained to beat the Hun; they can also be trained for trade conquest. If woe be to us, we can only say in the language of prayer, *mea culpa!*

And yet the way out is clear if only the manufacturers of America will respond. Wonderful to say, the leaders of labor and the employers are of one mind and of one will in this matter. The manufacturers have long bewailed, without correcting, the inefficiency of their wage earners; but now the bewailing comes from representatives of labor! While the Secretary of Labor, the Honorable William B. Wilson, in his official capacity, represents alike the interests of labor and of employers, he is so depended upon by the wage earners as often to be considered their especial representative. The above statements are from his Department. The Secretary has said: "The employer and employee have a mutual—not identical—interest in procuring the largest possible production from a given amount of labor."

Harmony at Last!

SECRETARY Wilson's institution of the U. S. Training Service, with approval of Congress, is an appeal to the employers of America for the development of the knowledge and skill of our wage earners to the highest degree reasonably possible.

Never before has there been such concert in judgment and purpose as in this new work. Mr. Samuel Gompers, the President of the International Association of Machinists, and others are of one mind with the Secretary.

The methods of the Training Service have been tested in Europe, by all our Allies, as well as in this country. They are very simple. They are only a logical development and intensive use of the principles upon which all modern development rests. Every manufacturer employs experts for each great division of his enter-



prise. He has a superintendent and foreman for each department, who concentrate all their efforts upon that department.

He has a tool room in which men especially chosen and fit maintain the standards of his physical instruments of production. The new proposal simply does the same as to the human elements of production. Men of special aptitudes for training workers are delegated to that task and simply make a job of it.

Is it not strange that we have specialized on everything in manufacturing except the training of the human beings involved in it? Every horse (and every dog!) is carefully trained, but almost never a mechanic! We quiet conscience by saying that their foremen are training them yet we know they don't and can't.

Under the new practice a training department is usually set up in the plant and com-

monly enclosed by partitions. Representative machines are put in it, of such numbers and kinds as are necessary to train the right number and proportion of workers to keep the plant in balance. We thus have a human tool room. Everything done in this room is upon a regular production basis with quality and speed and real mastery of each task as the prime consideration.

The training department is a laboratory and a place where perfection in method and quality are insisted upon. One great plant, having \$740,000 in its annual budget, was producing, according to its audit, cheaper in the training room than in the factory—so that the training itself cost nothing! Wastage was almost nothing in the training department but great in the factory.

Several plants have been spending at the

rate of from \$400,000 to \$500,000 in recently developed training departments. These are not expense items. They are offset by production which is expected to be as low in unit cost as in the shop. The training, moreover, often doubles production and insures extra profit permanently from and for each worker.

In a great small arms plant many skilled men requested opportunity to work in the tool room training department and qualify themselves in a single month for better, permanent positions, knowing that the wages of the learners were less. In a button factory (that recently had an order canceled for 43,000,000 buttons, such as are worn on all men's coats) the period of training to full production was reduced in the training department from eight months to thirteen weeks, with corresponding

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The Water Giant Waits

How 75,000,000 sun-created horsepower and a legal technicality have resulted in a Congressional pickle

By WILLIAM B. HEROY

Chief, Division of Power Resources, Department of Interior

FIFTEEN hundred cubic miles of water, lifted by the power of the sun, fall on the surface of the United States each year. A third of this amount, descending from the mountains and uplands through the stream channels, eventually reaches the sea. The force of gravity, drawing this water downward to the ocean level, creates that great natural resource called water power. If all this water could be made to yield its power through every foot of its fall it would give to the nation several hundred million continuous horsepower.

But much of this power is not recoverable, and engineers believe that only a fraction of the theoretical amount can be developed. Approximately 75,000,000 horsepower are believed to be capable of development by the construction of waterpower plants and of reservoirs for the control of floods and for the regulation of streams so as to prevent waste of the water. These facts indicate the extent of our water power resource.

The United States has installed machinery for the production of power to a capacity of no less than 40,000,000 horsepower, but of this amount only about 6,000,000 horsepower is driven by water, representing less than 10 per cent. of this great natural resource. The remainder of this machinery is driven by steam and gas and is dependent upon fuels, chiefly coal, for its operation. At least 200,000,000 tons of coal are consumed annually for the production of power in stationary engines and another 175,000,000 tons are used in railway locomotives; fully 60 per cent. of the coal mined in the United States being used for motive power.

Even our fabulous wealth in coal deposits is staggered to pay so great an annual tax, and the nation insistently asks why water power, at least in part, cannot replace this coal. The thirst of the people rebels against the waste of

mineral fuels, the expenditure of the wealth inherited from past geologic ages, while water powers that are not exhausted by use, the dividends of the present, remain uncollected and undeveloped.

The failure to use this wasted energy cannot be attributed to lack of need. The appetite of

water and fuels as sources of energy. Every industry desires the cheapest power. If power can be produced more cheaply and dependably from fuels it will be produced from fuels in preference to water power. But even when power derived from water is cheaper, its use is by no means made certain, because the cost of

water-power plants averages much greater than that of fuel plants of the same capacity, even though the cost of operating water-power plants is much less. The obtaining of the capital in excess of that needed for steam power has therefore often proved an insuperable obstacle to the harnessing of water powers.

The Question of Costs

IF the cost of power developed by water at a particular site exceeds the cost of power that may be obtained from fuels in the same locality, and if in addition a much larger outlay of capital is required for the construction of the water-power plant, business men, however altruistic, can scarcely be expected to use water power for the sake of saving coal. There are, however, many water-power sites, both east and west, that can be developed so as to deliver power much more cheaply than it can be obtained from fuels.

The development of such sites is attractive from the standpoint of the business man and will proceed if there is a nearby market for the power and if there are no insuperable legal obstacles. How many sites there are that may be thus developed under present conditions of labor, materials, and finance is conjectural. It seems probable that there are several million horsepower available in sites of this character, that may be regarded as ripe for development.

A number of these commercially feasible water powers are in part the property of the public. They may be on public lands or on

ENGLAND is planning the construction of vast central station plants for the production of electrical power for her industries, the object being to reduce factory power costs. Since 1910 France has built up a million horsepower by hydro-electric means. In Italy 218 concessions for nearly a million electrical horsepower in centralized water development plants are being examined.

Barcelona, the "Pittsburgh of Spain," is replacing steam by hydro-electricity. Denmark, having no water power, is asking Norway and Sweden to cable her electrical power across the Skagerrack. Austria put her water power development under a special ministry. Canada is at it. Even India, by storing up the monsoon rains, is throwing 100,000 horsepower into a valley which is dry nine months of the year!

And the United States! No nation faces a greater need of saving its mineral fuel resources, of harnessing the inexhaustible power of falling water, than ours. For ten years we have been trying to remove the chief obstacle—a legal technicality. The present Congress has all but put a bill over. It is a dramatic story. Mr. Heroy has told it here impartially, simply, briefly—THE EDITOR.

industry for power is keen, almost insatiable. A million new horsepower a year is eagerly devoured by manufacturing alone. But this great demand has been met chiefly by the building of more fuel-power plants, while water-power development has lagged. This observed result can be thus simply expressed, but the causes that lie behind the stagnation are fairly complex.

The principal group of causes centers around the competitive relation that exists between



rivers that are navigable and hence under the jurisdiction of the Federal Government. The principle is now generally accepted that a resource of this perpetual character must remain in the ownership and control of the nation. The issue has therefore narrowed to a consideration of the manner and conditions under which the utilization of water powers owned by the public shall take place.

Where Capital Shies

AT the present time this important class of power sites is practically withheld from use because the conditions under which they may be legally acquired are so insecure as a basis for investment that capital is, as a rule, unwilling to make the venture. Some have advocated, as an alternative, the development of the power as a public function, either by the Federal Government, by the individual states, or by municipalities. The majority seems, however, to favor development by private agencies under lease from the Government as the most satisfactory solution of the problem.

But this solution requires legislation, as existing laws do not permit the leasing of the sites. Bills authorizing such leases and setting forth their terms have been introduced at each session of Congress for the last decade. Some have even passed one house only to fail in the other.

Because of the fuel crisis of the past year, however, a greater advance has perhaps been made at the present session. A bill, introduced by Senator Shields, passed the Senate on December 14, 1917. At about the same time the President had requested members of the House of Representatives to give consideration to a bill prepared under his direction and embodying the views of the executive departments as to appropriate legislation on this subject. After consideration of this proposed measure by a special committee, this bill was reported to the House and, with some modifications, was passed as an amendment to the Senate bill.

This procedure threw the measure into conference between the two Houses where it has lain for many months. The differences of opinion among the members of the conference committee have heretofore proven irreconcilable. Unless it becomes a law, the bill will die March 4 with the expiration of the present session of Congress and the work of two more years toward the solution of this problem will have come to naught.

The Opposing Camps

THE water-power bill now in conference, if it can be dislodged, will probably be reported in a form closely resembling the House measure recommended by the President. In that form it is the result of a compromise between two opposing schools of thought. In one group are those who, seeking water-power privileges, desire to obtain workable conditions for

financing and, naturally, the most liberal possible terms. In the other camp are those who, recognizing the value of the resource, are zealous to safeguard the use of these privileges and to obtain for the general public the greatest possible benefit. With such wide differences in view as to a proper law it can scarcely be expected that any bill can be presented that will win the unqualified approval of all those interested.

It is therefore a high tribute to the administration bill that it has won so much praise and aroused so little antagonism.

In its present form it provides adequate security for money invested in water-power development, the opportunity to earn a reasonable return thereon, and assurances of the return of the investment if the water power is taken over by the public at the expiration of the lease. On behalf of the public, it provides for supervision of the plans and construction to insure proper use of the resources, for control of service rendered and of rates charged for power, for honest capitalization and fair distribution of output, and for use of the power for military or other needs in time of war.

The points in dispute are technical details, such as the exact length of the lease and the precise method of ascertaining the value of the plant if it is purchased by the Government after it is built. It will be highly unfortunate if an agreement cannot be reached on these details so that the purely artificial barrier to water-power development erected by law may be removed and the full usefulness of this resource obtained.

Putting the Eastern Waters To Work

Some words on Power by Franklin K. Lane, Secretary of the Interior

THE country is now passing through a period of transition, which, I firmly believe, will soon be followed by one of industrial activity and expansion. The enormous development of war industries had created an almost insatiable demand for power, a demand that was overreaching the available supply with such rapidity that, had hostilities continued, it is certain that we should now be facing an extreme power shortage. Happily such a crisis was averted by the signing of the armistice,

and the ensuing curtailment in the demand for war materials has carried us past immediate danger of a power famine in the industrial region of the North Atlantic seaboard extending in general from Boston to Washington.

This subsidence in the demand for power will, I think, not be long continued. In a few months and especially in the regions mentioned, I anticipate a greatly increased demand for energy, for which present facilities are inadequate. This demand will follow the resumption of industry under the operation of normal economic laws and in the face of international competition, factors that have been largely inoperative during the war. If the country is to reap the full benefit of this returning wave of activity it must be prepared to furnish industry and transportation with an adequate, dependable, and economical power supply. Only by increased economy in the production and distribution of power will it be possible for our manufacturers to decrease their production expenses and compete successfully in the world markets, maintaining at the same time the American standard of wages and living.

The proposed system of power supply has for its central idea the development of a plan for the generation and distribution of power on a scale far more comprehensive than now ex-

ists in this territory and the more efficient use of the power in industry and in transportation.

This result will be accomplished through the interconnection of existing power centers by means of a trunk-line transmission system of high efficiency. Into this trunk-line, energy will be fed from hydro-electric plants and steam-power stations located at tidewater and near the coal mines. From it will be taken the power required for each principal industrial center and for the electrification of trunk-line railroads and of such branch lines as may be located in metropolitan districts.

I am reliably informed that as a conservative estimate 50 percent. of the fuel now used by the railroads in this territory can be saved through the operation of trains by electricity instead of by steam locomotives, because of the much higher efficiency that can be obtained in the economical central station in comparison with the wasteful steam locomotive.

The transmission of this energy as electricity instead of the hauling of coal by rail will relieve the railroads of this territory of an enormous freight burden, thereby making available transportation for the hauling of other commodities. This is a matter of far-reaching importance. Not only would the railroads in the immediate territory be relieved

of hauling the coal for their own locomotives but other railroads supplying them with coal would be relieved proportionately. This easing of the present strain on trackage and equipment would result automatically in an increase in transportation facilities, the necessity for which the country is now facing.

Such a comprehensive system of power supply will give opportunity for the more continuous use of existing power plants through the operation of the diversity factor; that is, power for which there is no demand at a certain time in one locality can be transmitted to another locality needing power at the moment. Spare units in one power center can then be used to assist other power centers in case of emergency or breakdown. A large amount of spare capacity can thus be brought into service and the capital already invested in existing power stations thus made more productive.

I am urging the earliest possible action, because I believe such a plan should be formulated at once before we enter upon a new period of industrial activity. I have prepared an estimate of \$200,000 to finance a special investigation and report on the water power possibilities of the Boston to Washington region and have urged that Congress consider favorably the plan for its expenditure.

Industry's War Foundlings

Protection of our "Key" industries is proposed because they contain factors necessary to the future of many other crafts

By WILLARD M. KIPLINGER

BUT of returning peace conditions has grown the question, What shall we do for our essential industries? Most are strong and healthy, and need no special governmental consideration. Others are war babies, born of urgent necessity in times of industrial stress. Some of these must either die or be nurtured, now that old conditions of trade competition are soon to be resumed. In days of war, when the nation's interests were more homogeneous, when industries were compelled to depend more fully on the country's resources without aid from other lands, efforts were made to develop and cultivate what have since become known as "key" or "pivotal" industries. Dyes, optical glass, knitting machine needles, steel alloys, and certain drugs may be mentioned as typical examples. Each now is confronted with the vital question of whether the nurturing is to be continued, and inasmuch as tremendously big industries depend on these small enterprises the question is equally vital for the nation.

Of course, iron and steel manufacture, coal mining, textile and machinery production, railroad transportation and agriculture are examples of the nation's truly essential industries. Our social organism simply would not live without them. But neither would they live without the unobtrusive, but no less essential pivotal industries.

Many of these pivotal industries are not war infants, and many industries developed during and because of the war certainly can not be considered worthy of governmental protection. So it is no simple task to separate the war babies which should be kept in economic incubators from those which will thrive in the open air of free competition. It is a delicate

job to determine the enterprises not truly important to our big industrial family and which consequently might decline without serious effects. British economic experts went to work on the question more than a year ago, in their Committee on Commercial and Industrial Policy After the War, and recently reported!

"There are certain special commodities which, while the branches of industry engaged therein are not of such magnitude, are essential to national safety as being absolutely indispensable to important British industries, and were supplied before the war entirely or mainly from present enemy sources or from sources under present enemy control."

Under this definition, the British committee decided its national key industries, requiring special treatment, included those producing synthetic dyes, zinc, tungsten, magnetos, optical and chemical glass, hosiery needles, thorium nitrate for manufacture of incandescent gas mantles, limit and screw gauges and certain drugs.

What Is a Key Industry?

BUT key industries for Great Britain are not necessarily key industries for the United States. No governmental or other authorized agency has attempted to say what are the key or pivotal industries needing special treatment here. But most students of current economic conditions agree that in this class fall the manufacture of dyes, optical and chemical glass, needles for knitting machines, and a number of medicinal materials.

Dyes, for instance, neither nourish, shelter nor clothe a man. But without dyes, there

would be poor raiment on our backs, drab interiors for our homes, monotonous sights along our streets. If we had to wear natural-color fabrics—and this means white clothes, probably dirty white—we would postpone buying clothes out of sheer dislike for the lack-lustre materials. Therefore a dollar's worth of dye sells ten thousand dollars worth of suits, dresses, rugs, curtains, paint, wall paper, and printed books.

To judge the importance of the dye industry by the value of its output would be like measuring the value of American newspapers at two cents the copy, or the production of sermons at fifty cents the auditor, or the worth of a front tooth at the current market price for porcelain.

Consumption of optical glass forms an infinitesimal fraction of the whole output of glass in this country. Yet without glass of the peculiar qualities necessary for lenses, requiring unusual scientific skill and craftsmanship in manufacture, in what a predicament would our hundreds of thousands of bespectacled citizens find themselves! How could we have microscopes, telescopes, field glasses, gun sights, cameras and photographs, motion picture machines, periscopes, and other articles on which our national well-being and even safety depend?

Without knitting needles our looms would stop, and vast industrial districts would be crippled.

Without anesthetic drugs, and certain other medicinals universally used for treatment of prevalent diseases, sickness and death would increase, and the grip of pain, relaxed under modern science, would tighten.

Similarly, there is a multitude of other ma-

terials which many authorities believe are entitled to be classed as "key" and to be entitled to special consideration. Among these are surgical instruments, tungsten and manganese, potash, and a variety of acids and chemicals, particularly those wonderful stuffs produced from coal tar and petroleum.

A vast number of styles and sizes of surgical instruments are used by the 140,000 medical men in the United States, and without them the science would be hampered. Sharp cutting steel tools could not be made without tungsten in steel, and steel for a thousand absolutely essential purposes would be valueless without manganese for alloy. It is not exaggeration or mere whimsical conception to say that a modern farm could not be operated except for tungsten and manganese. Without potash, the production of cotton and wheat and corn would decrease. Without thorium nitrate, produced meagerly in this country before the war, we could not have gas illumination, or at least the light would be poor and flickering.

Small in Volume, but—

THIS is only a partial list of essential commodities, considered in the most cursory way. But the production of each of these articles has common attributes. The output is small in volume, and the aggregate profit is likewise meager. Before the war, the United States depended for them on other countries, mainly Germany, which specialized in a larger number of "key" industries, and came near to supplying the world. There was profit in them when produced on such a large scale and with a measure of governmental encouragement.

Now that peace is in sight and trade competition promises to be restored, some American interests which hastily took up the production of these essential commodities when war interrupted the normal supplies, are considering dropping them and relying again on former enemy sources or at least on foreign sources.

The last condition prompts most forcibly the question, What are we going

to do about it?

A few serious students of economic problems advocate doing nothing about it. They believe in industrial and commercial inter-reliance among nations, the same as between South Caroline and Massachusetts.

Other equally serious students urge the development of a larger degree of economic self-reliance within each nation, and specifically within the United States. Their arguments in the main run something like this: First, Competition between industries of each nation insures ultimately the maximum of progress; monopoly is dangerous, particularly when maintained within a single nation. Second, the waste transportation of materials from one country to another is minimized by a large degree of self-dependence. Third, in case of war or other disturbance of international trade routes, a nation may be forced suddenly to be industrially self-reliant, and "key" industries can not grow up over night.

After pondering for months, the British Committee on Commercial and Industrial Policy, whose action is worth consideration because Great Britain's industrial problems bear some relation to ours, declared for this policy:

"Some governmental action should be taken to promote and safeguard the development in the United Kingdom of industries of a special or pivotal character, or those which, while essential for munitions purposes, are not of sufficient commercial importance to insure their development without such state assistance."

These industries, the Committee declared, "should be maintained at all hazards and at

all expense. No ordinary economic rules apply to the situation of these minor but important industries. They must be kept alive by loans, or subsidy, by tariff, by government contracts, or in the last event by government manufacture."

Some of these methods of cultivation, of incubation, might be used in the United States. The government might extend loans to help essential infant industries over the readjustment period, but it would require legislation to give this function to the War Finance Corporation, as it is now organized. The tariff is an instrument with whose use we are familiar, but even its friends admit it is clumsy and inflexible. We have no machinery for administering production bounties or subsidies in normal peace

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The wise man provides coops before his chickens disappear

Breaking the Price Deadlock

Prices must drop: President Wilson has approved this plan which proposes to shorten the agony and start things moving

By BEN H. LAMBE

An authorized interview with William C. Redfield, Secretary of Commerce

THE thing most desired in the business world today is a speedy return to normal conditions with proper price readjustments and a general resumption of industrial activity. It is no secret that some aspects of the situation are critical and that business leaders as well as government officials are very much concerned as to the outcome.

At the time the armistice was signed the almost universal prediction was that, in view of the general depletion of stocks throughout the country, business would resume immediately in great volume. But the guess was wrong. Buying, instead of starting with a rush, is almost stagnant. The manufacturer is buying from hand to mouth and the public is purchasing just what it has to have and nothing more. Everyone is waiting for what he believes is an inevitable fall in prices.

Study of the situation has convinced many industrial leaders that the time has come to take hold of prices and readjust them through cooperation with the government to a point where confidence can be restored and buying will be resumed. This has found its expression in a plan proposed by Secretary of Commerce Redfield, for a government appointed committee to deal with the situation. This board, in conference with the producing interests of the country, would ask for reduced prices at which the government, a big buyer, would purchase its materials.

Setting the Price Pace

AND the belief is that when the government announces publicly the basis on which it is willing to buy its goods the public will fall in line and buy freely at same prices.

Secretary Redfield, who gives chief credit for the plan to W. M. Ritter, one of the largest hardware producers in America,

points out that price fixing is in no way involved and that the plan is not one of government interference but one of cooperation between the government, labor, and industry. Members of the cabinet have given it their official approval and after looking at it from all sides have come to the conclusion that it can involve no violation of the Sherman and Clayton Anti-Trust Acts.

"The situation," says Secretary Redfield, "can be briefly expressed by saying that our industries are presented with an unpleasant pill to swallow. Prices must come down. Industry cannot make it easier to swallow the pill by licking off the candy. The sooner the pill is swallowed and cheerfully accepted the sooner will production spring back to normal. The sense of the whole thing is to bring about a reduction of prices by voluntary agreement. Everybody expects prices to fall sooner or later and the best thing to do is to bring them down at once."

"The times demand cooperation as much or more than during war times. All that is needed is the right kind of get-together among those interested. In my opinion the result is bound to go very far towards carrying us through the present threatened industrial depression. One of the main reasons why it has my support is that it is another step in the direction of obtaining closer cooperation between the government and the business men of the nation. Six years ago I dedicated my efforts toward allaying the suspicion that has existed between government and business. This new proposal is a means of bringing the most helpful and strong sort of cooperation between industry, government and labor. The object is to attain by common counsel in an open way a result greatly needed by all."

"The three parties to the plan—government, capital and labor—will endeavor to bring about a level of prices at which the government itself will be glad to make its own purchases, prices such that the government can turn and say to the general public: 'This is a fair basis of prices.' An example of the result created occurred recently in the West. A large concern there whose business

was rapidly falling off reduced its prices twenty-two percent. A market immediately was created for its goods. The concern was saved from shutting down. There are many other concerns doing slack business now that might be started again in the same way. They hesitate to cut prices because of the fear of losses and a fear that their competitors will not do likewise.

"When in any one line a price basis is developed which is satisfactory to the buying public, business is bound to spring up. There may be losses in some cases. They are inevitable in the circumstances. These very losses themselves will lead to conditions under which markets will be created and satisfactory arrangements with labor established.

How It Will Work

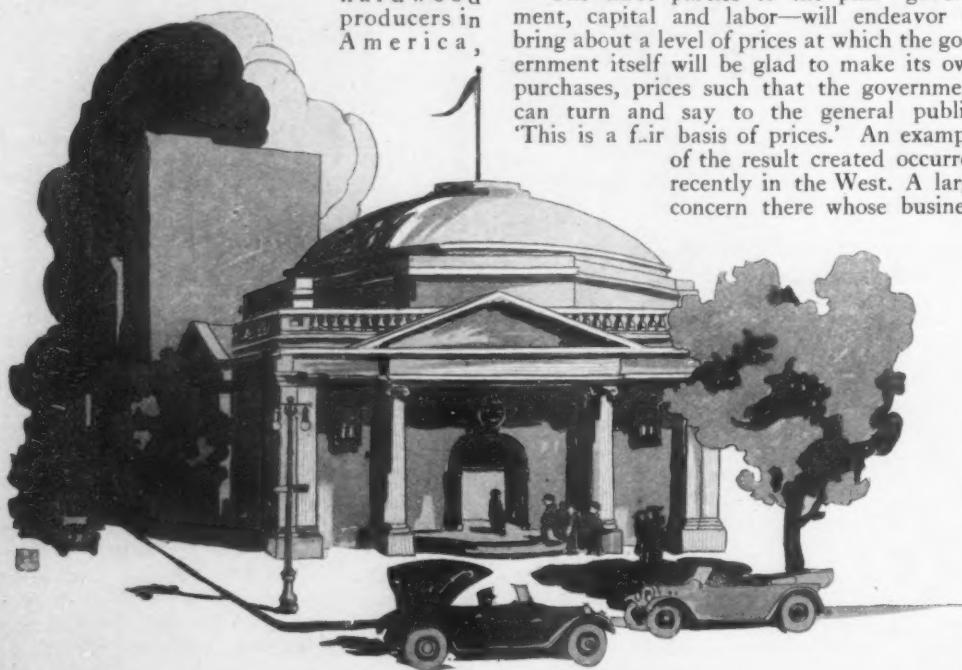
TWO conditions attendant upon such a maneuver present themselves. First, an increased demand will enable the producer to manufacture at a lower cost. By so doing, the manufacturer will be better able to pay labor and to buy necessary materials. Secondly, having produced more, prices on the part of all producers naturally will come down. Labor will thus have a high relative wage and wages cannot come down until the prices of commodities fall.

"An idea of what the copper industry has already agreed to do in preliminary conferences will make clear this price reduction and stabilization proposal. When it is remembered that the copper industry was producing 600,000,000 pounds of copper a year for war needs one can see the extent to which the rate of production was accelerated. When the war ended the demand for copper fell off and producers were up against a serious situation. The industry got together, went into conference with government officials and some of the largest buyers. A sharp reduction in price followed and buying has been resumed to some extent. The government is making some purchases and other buyers are following."

"Let us take a look at the labor situation, the phase of the trouble which is so alarmingly presented in the papers. At this time of the year unemployment occurs in the northern states. Since industries are becoming more and more stagnant because buyers are not asking for their products, the unemployment situation is intensified. The situation demands serious study and attention. It is a good time to remember that anarchy of mind has its basis in an empty stomach."

"We may either let matters drop and solve themselves in time or we can accelerate the process of the approaching industrial equilibrium. By accelerating the process I think it is very possible to avoid social dangers that are otherwise possible."

"The question as to whether price reductions throughout the industries would be in violation of anti-trust laws has been discussed in cabinet meetings. My statement on this subject is not final but I can say that there is a



general understanding that nothing in the anti-trust laws prevents the raising or lowering of prices as such. The anti-trust laws take into account the purpose for which and the method by which this raising or lowering is to be done. Some restraint of trade must be found. The object of the law is to set trade free.

"Surely the proposal we have in mind is free from all moral objection. It can easily be accomplished if the parties to the agreement are willing. It must be remembered also that it is the government which asks producers to come in and discuss prices for its own benefit. By thus endeavoring to secure a good buying market for itself, the government, which is the collective people, surely cannot be accused of trying to restrain trade."

Attention has been called to the fact that

many high cost producers might be put out of business by general price reductions. Secretary Redfield and other members of cabinet have taken this into account and Mr. Redfield says:

"There are two kinds of high cost production. One is where a producer leaves some specialty to go into war munition manufacture. In his case it obviously would be a benefit to induce him to return to the production for which he is normally best fitted. The other kind of high cost production is caused by small production with a high cost labor. The small production is the cause of the high cost. By an agreement such as is contemplated some of these producers might be put out of business. But the alternative presents itself: What is better, to preserve the life of wasteful producers or to reduce the state of stagnation in the whole country?"

"Manufacturers whom I have talked with have shown a willingness to operate for a time if necessary at no profit at all, believing that the greater production certain to follow would make them good."

"Whatever we do must be done soon. There is no doubt in my mind that the result will be very satisfactory. It will promote the right psychology. It will hasten the process already under way and which is inevitable. Results, when attained, will immediately be announced to the entire industry and to the public in general. All that it will mean will be that this is a price at which the government has decided it can buy materials. The effect on other buyers will be in proportion to their respect for the Railroad Administration, the Emergency Fleet Corporation and other government agencies as good business organizations."

Is The World League Good Business?

An informal talk about battleships and banks
T. N. T. and taxes—and peace that pays

AMERICAN business declared itself for a League of Nations more than three years ago. The several hundred thousand members of organizations represented in the Chamber of Commerce of the United States, voting on six proposals presented by a committee of the Chamber, urged their government to take the initiative in bringing about concerted action among the nations of the world.

While the League of Nations was not included by name in the proposals, such a definite organization undoubtedly was in mind when the vote was cast. The only proposal that failed to carry was one calling for the use of concerted military force. As to the use of economic pressure the vote was overwhelmingly in its favor.

When creation of the league was under active discussion two months ago, the Chamber named a committee to work towards carrying into effect the proposals voted for by its membership and cabled President Wilson, then in Paris, calling his attention to the action that business had taken. The committee, which has been enlisting the support of member organizations in the movement for a League of Nations, consists of Edward A. Filene, of Boston, Philip H. Gadsden, of Charleston, S. C., and George E. Roberts of New York City.

The League with its international controls will eliminate some of the most stupid evils of modern world business. A month ago a corporation in New York City had gotten together three million dollars to go into Peru to buy and develop sugar plantations. The impending trouble between Chile and Peru made it impossible for Americans, or anybody else, for that matter, to invest money in Peru.

If there had been a League of Nations which was looking after these internecine troubles that investment would have been made. And consider what it would mean to Peru as to industrial development. Consider what it would mean to the United States at this time to be able to find foreign places in which to invest this great amount of money and credit that has come to us since the war.

Go further: consider the consumer. The development of new sugar plantations in Peru, bringing out new supplies, is bound to react

on the price of sugar and the consumer would naturally profit.

Consider also what such a development in Peru will do for the buying demand of the Peruvians. Standards of living will be raised; demands will be made on us for our goods; and the ships that will go down to Peru to bring back the sugar will carry American manufactured goods to the Peruvians.

This one incident shows how a League of Nations, in a new way, not with battle ships and cruisers as in the past, but looking after the interests of foreign investments, preventing exploitations, extraordinary concessions through bribery and graft, will have a direct bearing on the trade of this country. This is to be the greatest benefit this country will get out of the war.

Backing Money With Gunpowder

GERMAN investments have been protected by cruisers. Of English investments the same can be said. We have never protected our foreign investments, have discouraged them in fact. We could not stomach the idea of sending American boys down to Mexico to get shot up in order to protect mine concessions that were got from the Mexican Government by some shrewd American capitalists. Now with an oversight of these international industrial affairs we shall supplant by a stroke of the pen the necessity for immense armaments.

A few years ago the Japanese and Americans were struggling to get some rich mining deposits in China. The Japanese were ruled out and the Americans were just about to complete the deal when suddenly a little Japanese river gunboat came up in the vicinity of the deposits and the report was sent abroad that the natives had killed a Japanese sailor. His body was fished out of the river. As a result of this the Japanese Government declared a zone of occupation which included the deposits. The Americans felt something was wrong and with an American surgeon they dug up the body of this sailor and found that he had died from natural causes some five days before the date announced by the Japanese.

Some ten years ago a German by birth

but not by citizenship, going home late from a party at Port-Au-Prince in Haiti, had a row with the cabman. When the provincial police came up, he fought them. He was clapped into jail. On an appeal by the German consul, the German Government sent a cruiser to Port-Au-Prince. The Admiral landed and with the German consul demanded of the Haitian Government that unless \$20,000 in gold was forthcoming in twenty-four hours on board that battleship the cruiser would train its guns on the city. The records show that this \$20,000 in gold was delivered over to the Germans.

A League of Nations will prevent high-handed brigandage of this sort. The whole question of extraordinary concessions from weak governments will be on a different basis.

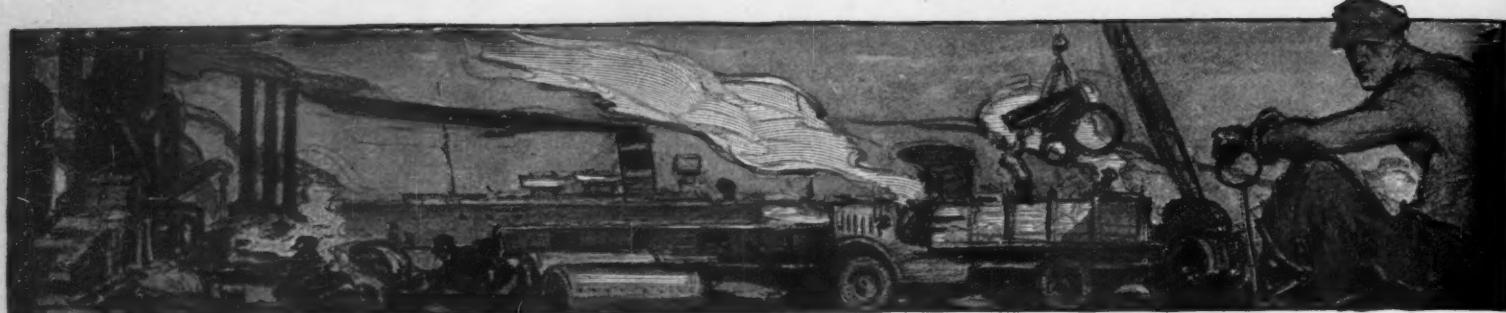
Naturally growing out of all this will come the questions of international unfair practices, intimidation, threats, boycotts, disparagement of goods, stealing of trade-marks, misbranding, cutting off competitors' supplies, and credit, bribery, inducing breach of contract, conspiracy to injure competitors, defamation of name and goods, the manipulation of bunker coal for competitors' ships, the distribution of shipping space in ships, and priority of such space. All of these practices will come under the supervision of a League of Nations.

The evolution of a League of Nations, with sufficient power, even if it be but economic power, to give greater stability to world conditions than ever before, is not purely an idealistic proposition.

It has very practical possibilities from the standpoint of the commerce of this country and the development of world commerce. Very interesting effect and important for the United States are its possibilities in preventing unduly tremendous taxation.

Almost for the first time in this country we are beginning to know what taxation is and we don't yet know it as foreign countries do. The taxation of European countries following the war is already double ours. As with them, a tremendous proportion of our taxes has been for military purposes, for protection against possible war and costs of previous war.

(Concluded on page 70)



Messrs. Wallingford Try Foxes

THE fox seems able to impart his cunning. On the shores of the Gulf of St. Lawrence several men in 1894 began to breed silver foxes. They kept their proceedings very much to themselves, followed the principles of selective breeding, and in course of time were sending to London the handsomest fox pelts that ever appeared in that market.

They were foxy fellows, in more senses than one. The skins they sent in small parcels from out-of-the-way stations, and they received reports of sales in a code that may have contained useful suggestions for the late Imperial German foreign office. By these means, half a dozen men contrived for awhile to monopolize the whole business of producing fine furs from domesticated foxes.

A monopoly is fairly difficult to maintain on this side of the Atlantic, whether in tinplate or in silver foxes. The monopolists showed such evidences of financial improvement that neighbors became envious. Eventually, the truth came out—that twenty-five skins shipped in 1910 had realized an average of \$1,300 each.

That news caused a flurry comparable in its way with the South Sea Bubble. Promoters organized companies and sold stock upon the pictures in beautiful prospectuses. Brokers ran the price of a pair of silver foxes up to \$15,000. For awhile the industry of raising silver foxes gave promise, in the minds of some of its devotees, of displacing gold mines, orange groves, and rubber plantations, as a producer of wealth.

Then the war came and blotted out many rainbows. Fox ranches are now producing pelts once more, instead of stock certificates.

More Wealth for the Jam Barons

JAM and tin go together, of course. In Australia, however, they have a new relation. Manufacturers of jam, dismayed at the rise in the price of the containers for their product, participated in projects for mining tin in Siam, and now scarcely know whether their riches are in the jam or its tin can.

Do Jews-Harps Produce Music?

BEAUTY spots, it seems, have such economic importance in war and peace that officials with the help of learned counsel and briefs have been pondering upon their essential characteristics. The officials who wrestled with the problem of beauty spots appear to be worldly wise; for they said they would summon to their aid the facts of common knowledge and experience and proceeded to take judicial knowledge of the uses and effects of beauty spots. When an importer protested that upon a quantity of court plaster cut into small stars, and intended only for use as beauty spots, he had paid 15 per cent ad valorem in duties, the officials avowed that upon an order for court plaster at a drugstore the articles before them made of cotton velvet with an adhesive on one side, and utilized in the ways they had observed, would never be accepted, and demanded duty at 40 per cent ad valorem.

Jews-harps likewise have caused pockers in official brows. Four judges deliberated regarding them and wrote an opinion of five printed pages, by way of remarking upon their antiquity and holding that they are not toys for the amusement merely of children but are musical instruments, even though they may not be capable of producing a complete tune. If this news ever gets

abroad, the jews-harps in many a humble little shop will look around for a grand piano with which they may strike up an acquaintance on terms of equality.

Squaring Shipping Accounts

SHIPS are costly affairs, but British shipping men do not let a thing like that deter them. Two of the most prominent British owners have entered into an agreement with the British Controller of Shipping to take over contracts for 137 steamers—a deal involving about \$100,000,000—and they in turn have offered to sell to private purchasers any of the boats at the price they pay.

They are doughty gentlemen, and they are not actuated wholly by a desire to avoid a policy of nationalization of ships, for England has already declared against that. Neither can they expect such profits from their huge fleet of "standardized" boats as those disclosed in January by a Japanese company, which announced it had cleared 18 per cent on its capital in the year. On the contrary, these Britishers seem to be intent chiefly in doing their "lick" in reconstruction.

Big figures seem to go inevitably with ships. It appears that Norwegian owners have asked for something like \$75,000,000 as compensation for their boats which our Shipping Board requisitioned. It is understood that in January an agreement was reached to pay them \$11,000,000, which will cover their investment, leaving any balance to negotiation.

Honoring the Sea Sweepers

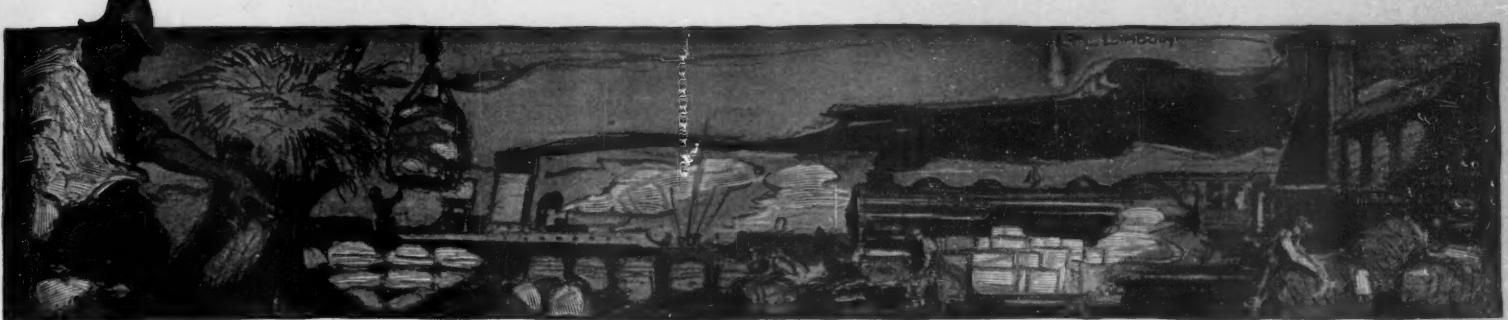
FISHERMEN from time immemorial have been ready to fight on the seas they frequent. In earlier wars they went in the fighting ships. In this war they set out in their fishing boats. The trawlers from one British port swept nearly 3,000 square miles of sea a day, in addition to keeping a channel 165 miles long clear of mines. After recounting their grave losses in men they have now listed their honors. The men of this one port gained the Legion of Honor (1), Croix de Guerre (4), D. S. O. (3), D. S. C. (17), D. S. M. (35), Medaille Militaire (1), Italian medal for valor (1), mention in dispatches (39). No wonder the Germans found the seas an uncomfortable place!

Taxing Political Ambition

SELF-EXAMINATION is promoted by the new laws under which the recent British elections were held. These laws so far depart from the old "blue" variety that they incorporate the Englishman's penchant for a "sporting" proposition. They allow pretty nearly anyone to become a candidate for Parliament but require each aspirant to post a forfeit of \$750. If a candidate obtains one-eighth of the votes cast he gets back his money. Otherwise, he loses his bet upon his own popularity and the money goes into the public treasury.

England's Peace Needs

RECONSTRUCTION orders for Canada from Allied European countries, or a proper share of them, are the chief quest of the Canadian Government Trade Mission which is in Europe. It is an agency of the Reconstruction and Development Committee of the Canadian cabinet. The creation of the mission followed representations made to the Canadian cabinet jointly by the Canadian Manufacturers Association, the Cana-



dian Industrial Reconstruction Association, and the Canadian Labor Council.

Materials and especially lumber, stocks of which are but a quarter of their usual size, are reported by the Canadian mission to be the most immediate requirement of England. It is announced that England will buy \$40,000,000 worth of lumber in Canada. Foodstuffs are, of course, another constant item in England's imports, and regarding them England is making some arrangements for the future. For instance, in December England and France upon behalf of the allies arranged with Argentina to buy the new crop of cereals which Argentina will soon begin to harvest in bountiful measure, if the magnificent prospects of December continue. Payments in this transaction will aggregate something like \$200,000,000 and, as in a similar arrangement used for the crops of 1918, will be financed through the Argentine Government lending the money for two years at five per cent.

Another of Those Australian Ideas

THE national trade mark as an idea has a possible new application. Australia, it seems, is considering a requirement that all goods imported should be marked as either "Made in the Empire" or "Not Made in the Empire." The Association of Chambers of Commerce of the United Kingdom has suggested that, instead, Australia go no further than require such a mark as "British-England," "British-Canada," etc.

The Chinese Way

THE point of view is a vital thing, but as diverse as the traditions of men. In China an official high in the present government has prestige and power as a patriot because he tried to commit suicide when the old Manchu order of things was overthrown. An Anglo-Saxon, with his different point of view, is left to wonder whether the Chinese attained distinction because of his lack of skill at self-destruction or because of his impetuous readiness to allow the new government to begin with a clean slate, so far as he was concerned.

The Latest On Style Reduction

STANDARDIZATION of the farm wagon appears to be an accomplished fact. With respect to farm wagons the important points for uniformity are the "track" and the width of body. Approximately fifty manufacturers have declared they will make only wagons which conform to the standards. Individual predilections and idiosyncrasies of individual farmers and of sections of the country will thus be restrained to wagons with a 56-inch track, but presumably individual fancy may still run riot in colors for running gear and box.

Farm wagons are not by any means alone in getting reduced within bounds. For paper, book, cover, writing, manila, or any other sort—the former Paper and Pulp Section of the War Industries Board has as a heritage left a programme, which would eliminate the time-honored ream and substitute "American Decimal Standards for Weights of Paper," which any tyro is expected to be able to understand and apply. These standards have not yet got along to the point of general acceptance, however.

On the whole, the American principle long ago worked out in ready-made clothing bids fair to get applied to a multitude of things.

Federal Trade "Called" On Decisions

UNFAIR competition that is within the meaning of the law creating the Federal Trade Commission is in a fair way to have some interpretation in the courts. From an order of the Commission a business house has taken the appeal which the law provides, and briefs have been filed. There are two main questions in this case—whether or not the Trade Commission Act made illegal any practices which were not earlier held to be illegal, and whether or not the Commission can issue its order against a business house which has already desisted from the practice against which the Commission rules.

Bravo! Canada!

THE Munitions Board in Canada, which succeeded the original Shell Commission, ended the war as a full-fledged national contracting organization dealing with Canadian war industries that employed 300,000 persons.

The tastes of the Munitions Board were catholic. With equal avidity it contracted for shells and for merchant vessels (1,200,000 tons of them), and bought timber and minerals. Following precedent in England, it built and operated seven national manufacturing plants of its own, giving them such distinctive names as British Chemicals, British Forgings, and British Aeroplanes.

When the war ended, eighty-five per cent of Canada's manufacturing industries were said to be operating on a war basis. This could not be interpreted to mean curtailment, either; for Canada's total exports, valued at \$43,000,000 in 1913, rose to \$636,000,000 in 1918 and its increase was not composed wholly of agricultural products, either. Obviously, the Munitions Board was a first-rate economic general staff.

Who's to Blame for Bad Service?

PUBLIC UTILITIES are among the industries that have been put in a difficult position by reason of increased costs that came with the war. Most industries have been able to adjust their methods of doing business to meet higher costs but public utilities, especially street railway companies, have no automatic escape from rising prices. They are limited by law in the amount of money they can charge for services.

Philip H. Gadsden, Chairman of the War Board of the American Electric Railway Association, declares the time has come for a standard franchise which will provide a proper return upon the fair value of property and guarantee efficient service to communities. The public, he holds, must realize that it has an interest in the continued efficient operation of railways and that it must realize also, he declares, that its interest in electric railways is far greater than that of stockholders or bondholders and that if these transportation systems are to continue to discharge their efficient service the public must guarantee a fair return on capital invested.

Tennis, A Proof of Progress

ALASKA would have us understand it has graduated from the pioneer stage. It has become a country of families; tennis is played; at dances it is not unusual to see both men and women in full dress, and strawberries raised in Chilkat Valley have taken gold medals in the "states." These are some of the latest assurances for the persons who still shiver at a name which has been placed upon refrigerators and other articles as a synonym of frigidity. Alaska wants every one to understand that it has by no means been completely "discovered" even yet.

Trade Truths That Hurt

Our soldiers, most of whom saw salt water for the first time, are coming back dreamers. They have seen other lands. Here is a nucleus for American internationalism

By EDWARD PRIZER

President Vacuum Oil Company, New York

OME months ago there appeared in *Life* a cartoon representing a farmer standing at a mid-continent railway station looking at a sign which, pointing eastward, read "1,800 miles to New York," and pointing westward, read "1,700 miles to San Francisco." Below the cartoon was the printed line, "What Do We Want a Navy For, Anyway?"

The words might as well have been: "What Do We Want Foreign Trade For, Anyway?"

Of all the great nations of the world, we are the most provincial. Great as our development has been, we are not yet much beyond the pioneer stage. We have, as a nation, no real vision of the great countries across the sea. In economics this country is still unlettered. We suffered repeated panics before we got a sound currency system. Our tax methods, municipal, state and national, are archaic.

When first, some thirty years ago, I went abroad to pioneer in the matter of foreign trade, I applied to our consuls. I found them uninformed and indifferent. Even when I persisted, and woke them from their placid and comfortable torpor, they proved wholly inefficient. They could not understand why a pestiferous young American should come over and ask them questions about tariff and taxes, local commercial laws and customs, about credits, collections and things of that kind, when nobody from home ever before had bothered them about such matters. Their surprise was natural, because they simply reflected the apathy of our whole country as to foreign trade.

Interest in foreign trade in this country did not extend, prior to the war, much beyond such of our citizens as inhabited a narrow fringe along the Atlantic and Pacific seaboards, and it interested only a few of them.

A number of years ago a consul in South America, noticing the dawning activity of the German and English consuls, decided

to do a little something himself. So he got together various samples of print cloths ordinarily sold in South America, and sent them to the Boston customs house. He wrote letters and had them published in the Boston papers to the effect that any manufacturer could have the samples any time he wanted them by simply paying the small charges on them. There was not a single cotton spinner in all New England who had sufficient interest to go and get the samples to find what was being sold in those countries. These samples lay in the customs house for two years and were then sold at auction with other unclaimed merchandise.

This condition brings me to the first thought

I would like to present. If we want foreign trade we must create a public sentiment in this country that demands it.

The farmer in the West has no realizing sense that in normal times what he gets for his wheat is its export value. The cotton grower in the South has no realizing sense that the price he gets for cotton is fixed on the Liverpool Exchange. When these men go to their banks to borrow money they have no conception of the fact that the rate of foreign exchange, indicating the tightness or ease of money in the great financial centers of the world, affects their interest rate. They are completely ignorant of the great economic forces controlled by the world exchange of commodities.

Now, we have got to accept some of the methods of our defeated enemy, the Germans, in the matter of making ourselves known. And first, we must teach our great country the importance of foreign trade. No nation ever became great and continued great that did not seek overseas business.

An Ancient Truth Bobs Up

THIS is just as true today as it was when the Phoenicians sent the venturesome prows of their trading galleys into the bays and inlets of the Mediterranean Sea; just as true as when Venice became great and powerful by

nation with great skill and power penetrating and securing the trade of all the countries of the world. Last, but not least, Japan, awaking from her Oriental lethargy, has cut rings around the United States with regard to the whole business of the Far East.

Why China Declined

WE need to spread the knowledge at home that no nation which stops its trading activities at its borders and feeds upon itself, can ever remain great when contending against the nations whose vision takes in the world. The former will decay, as surely as did China, which was so great a nation at the date of the discovery of America, that all the trading peoples of Europe were contending with each other to find the shortest route to her markets.

Only recently an officer direct from the front said in my hearing: "The English were the masters of the air, and we will not know until the history of the war is written what the Allies owe to them. The French, almost by intuition, were masters of artillery. The American infantry, however, was the worst drilled, but the most invincible body of fighting men ever known in the history of the world."

Gentlemen, do you know how provincial that American army was? The great majority

of those boys saw salt water for the first time when they embarked on it to go across the sea. Do you know, too, that many of these lads from the Tennessee Mountains never had on a pair of shoes until they entered the army?

I was born in a little town in Pennsylvania, a little eddy of civilization, at the end of a branch line. I have kept in touch with that little town by taking the county paper, and I have been astonished at the great number of boys in that town

and vicinity who have gone across the seas. Some of our oldiers are dead, many have been wounded, but the great body of them will return home unharmed.

These boys went over absolutely green, with no conception or vision of the great countries across the sea which were established long before the beginning of modern history. These green boys have, however, seen visions and will come back to us dreaming dreams; and we ought to take advantage of these boys as a nucleus for internationalism, and use them to wake up this country to its wonderful opportunities abroad.

(Continued on page 54)

We've Got the Figures All Right But—

YOU know the old story about the hard-headed but provincial New England manufacturer of cotton goods. One day he heard with amazement that 500,000,000 people lived in China. He knew that some of his goods went to China.

"Let's see now," he estimated, "if every Chinese added one inch to his shirt-tail, that would create a market for over 13,000,000 yards of my

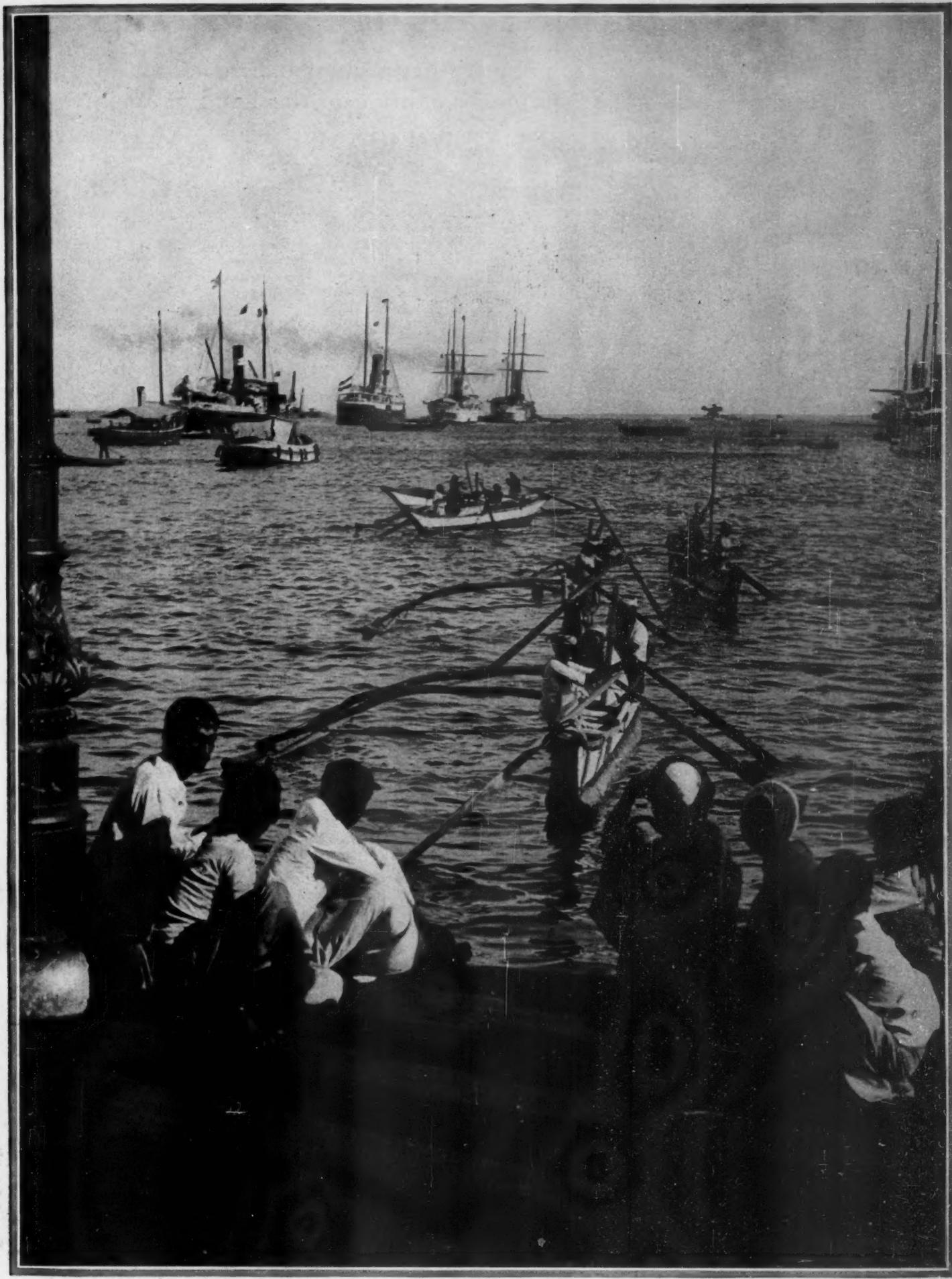
goods. Think of it! But how are we going to create the desire for that extra inch? Only one little inch! It shouldn't be difficult."

There is more truth than humor in this episode. It points to one of our weaknesses as a grown-up nation. Mr. Prizer in this article hits it off neatly.

The truth hurts some people. Here is the truth.

the control of the trade routes to the East; just as true as when Portugal, in the heyday of her glory, pushed her frail vessels down the coast of Africa and around the Cape of Good Hope to India; just as true as when Spain, seeking to enlarge the boundaries of her trade, accidentally discovered America; and when England, exploring all the seven seas for trade, established the basis of her great national power and wealth, which by her wisdom, far vision and grasp of economic principles she has steadily increased ever since, although her contemporaries of the fifteenth century, one after the other, have fallen asleep.

Germany, too, has furnished an example of a



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A noted social worker, after a visit to the American front in France, said: "Our boys are not dreaming of home; many of them, instead of wanting to return, wish to go further. They want to travel, to see the world." They dreamed of pagodas, sampans, native canoes with spi-

dery outriggers like those shown in this photograph of the harbor of Colombo, Ceylon. This romantic afflatus is being capitalized by our Shipping Board in the interest of our new merchant marine. A quarter million of these boys were interviewed. Over 32,000 have been accepted.

The Industrial Needs of New France

An official and eloquent description of war's destruction and a plan for our share in supplying materials—The business condition of the Land of Victory

By PIERCE C. WILLIAMS

Commercial Attaché of the United States at Paris

A FEW days after the armistice with Germany was signed I accompanied French Government officials and industrialists on an extended trip over the devastated region. I was invited to be one of the French party, in order that I might convey to American business men some idea of the enormous task that France, after four and a half years of war on its own soil, must now take up.

For three days, in highpowered army cars, we motored over several hundred square miles of what, before the war, was a region that had been dotted with coal mines, textile mills, blast furnaces and steel works, electrical power stations, chemical plants, and all of the varied establishments that characterize the modern industrial State.

Piles of Twisted Steel

WE visited Lille and the important spinning and weaving district of which it is the center. The Germans held this part of France from September, 1914, until October, 1918. We spent an entire day inspecting one pile after another of twisted steel and crumbling brick. They were all that remained of some of the most productive coal mines of France. At other times we wandered through the shells of buildings that had been systematically pillaged of their machinery by the Germans during their four years of occupation. The third day, for hour after hour, with scarcely a halt, we sped over roads that crossed the old battle field of the Somme. At frequent intervals we passed by low, grass-grown, moldering heaps of stones. We knew these to be the

remains of former prosperous "communes" or villages, because their names could be read in large white letters wherever there was a piece of wall still standing. The armies had been compelled thus to identify the ruined towns in order that their men might not lose their way as they moved back and forth over the abandoned and blackened country. In a large part of the territory we traversed the only signs of human life were the occasional rusting sheet-iron shacks, around which loitered British or French patrols. They had been left behind to tend the lines of communication that rolled away like straight white ribbons toward the French frontier, whither the German forces were retiring.

As a result of what I saw on that trip, and from what French industrialists engaged in organizing the work of restoration have frequently told me, I have no hesitation in saying that the collaboration of American finance and industry will be called for. But I must qualify this statement slightly by saying that the actual flow of orders to other than producers of raw materials, like copper, zinc, iron and steel, cotton, leather, industrial oils, lumber, etc., may be slower in materializing than the American manufacturer of industrial equipment perhaps expects.

World Cooperation Needed

MY reasons for making these two assertions will, I hope, be apparent from a reading of what follows. A glimpse of the devastated region is sufficient to convince one that the united efforts of the industrial world

would be required to restore in our day what the Germans destroyed. But in estimating the volume of business that American factories may receive it is important for our business men to realize just exactly what reconstruction signifies to the French nation.

The French Say "Reconstitution"

THE French task is much more than mere physical rebuilding, and the term the French employ to describe it indicates how vast the job looms up in their imagination. "Reconstitution" is the word the Frenchman uses, for what his nation has to do is practically to reconstitute, to recreate, to make over, in all of its varied aspects—so far as it is humanly possible to do so—the community life which, before the war, abounded in the now war-ravaged region.

It is really a problem in social engineering that France must solve. It is a colossal task in new world pioneering, made a thousandfold more difficult by the fact that it must be carried out in one of the oldest of Old World countries.

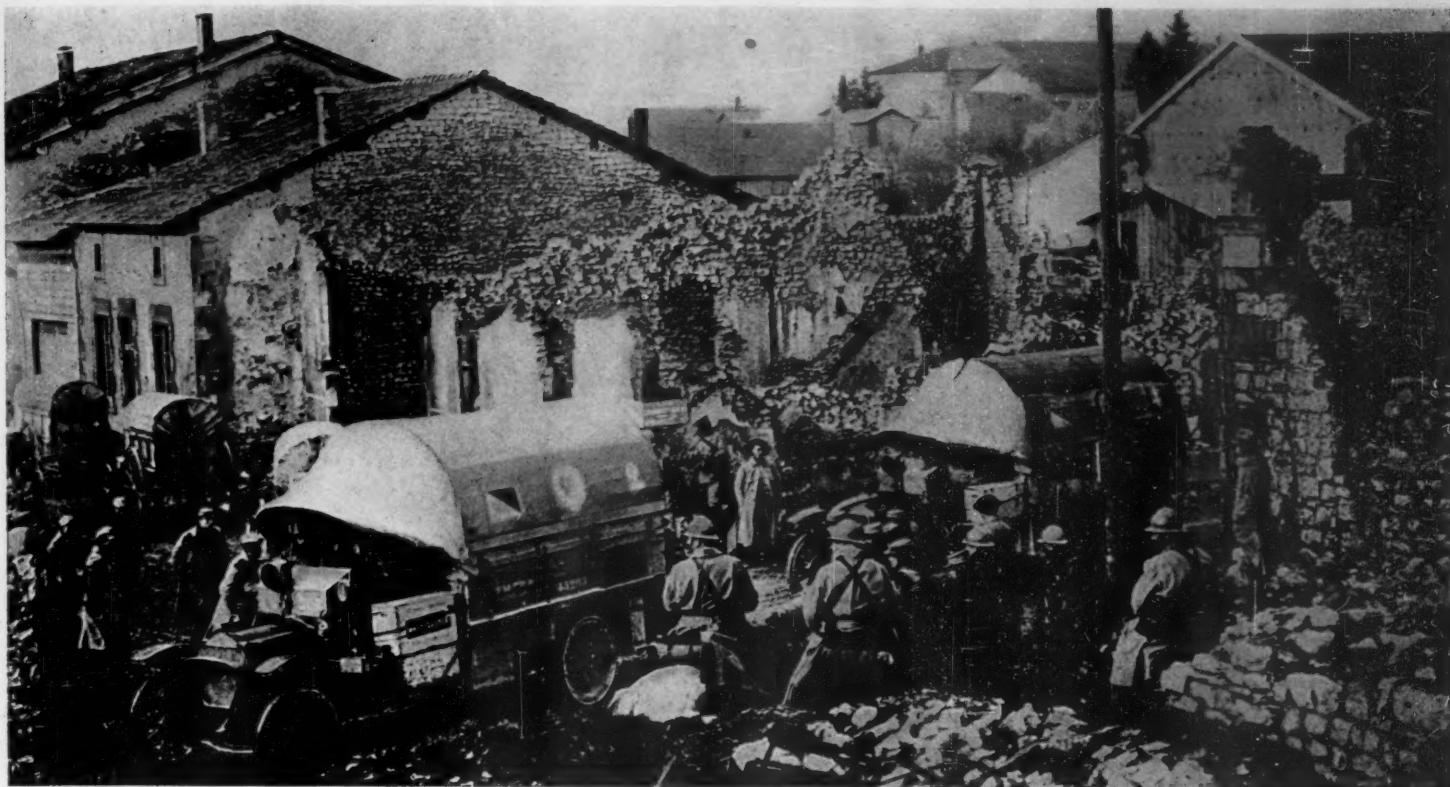
The fact that, in much of the invaded territory, there is a considerable population without means of livelihood introduces a human element that must determine the methods adopted by the French Government and the order in which areas and industries are reconstituted. Obviously, the reconstitution of an inhabited area must take precedence over that of an uninhabited one.



© French Pictorial Service.

With final peace the women of France need no longer bear alone the burden of producing food for their countrymen. Yet, with the soldier-farmers returned, a dearth of horses and shortage of labor indicates that American

farm machinery will play no small part in agricultural restoration—where restoration is possible. In some places so complete has been the work of devastation that the shell torn ground will be given over to pine forests.



A section of what was formerly the busiest industrial portion of the earth's surface. This village may never again hear the busy hum of industry's belts and wheels and look upon the cheerful firesides of its returned children. It may be consigned to the scrap heap for all time. Here

"reconstitution," not reconstruction, is needed. This town, like Arras, may be razed to the ground. What good are money and materials here where there is no civilian population? The human problem comes first. Next comes capital, itself a vast problem, not to be solved in a hurry.

To appreciate this point it is necessary to recollect that there are, roughly speaking, two sorts of devastation in the area which the Germans, at one time or another, overran. Each kind introduces a distinct problem in reconstitution and must be handled in a distinct manner.

To begin with, there is a zone of practically complete destruction. Starting at the English Channel, in the northwest corner of France, it winds in a band of varying depth all the way across the country to the Swiss frontier. On an average, it is perhaps 5 miles deep. This band follows the "old front line." Over the Departments of Pas-de-Calais, Nord, Somme, Aisne, Marne, Meuse, Meurthe-et-Moselle, and Vosges, it cuts a hideous gash in the fair face of France.

Complete Destruction Zone

FOR months at a time during the past four years large sections of this line remained stationary; that is, there was no important action, but a rain of high-explosive shells descended unceasingly upon it, so that everything that stood above ground was sooner or later blotted out. Whenever a big offensive took place, such as the Allied advance at the first and second battles of the Somme and the unsuccessful German attack on Verdun, the zone of destruction was widened and deepened. This area of wholesale destruction includes an important section of the French coal fields, of which Lens was a center. It also comprises several hundred square miles of fertile farm land in the Departments of Somme and Aisne, with all the towns and villages that dotted them, as well as the former populous cities of Arras, Douai, St. Quentin, Cambrai, Laon, Soissons, Rheims, and Verdun.

Much of this area may never be rebuilt. A large part of it is now uninhabited, the former residents being scattered all over France. Some of the farm land is so badly torn up by shells that it may never wave with grain again and

may have to be given over to pine forests. The stone heaps, which are all that remain of several hundred picturesque "communes," may be left as an enduring monument to Germany's nightmare of world empire.

Damage Not So Great in Second Zone

BETWEEN this zone, over which the battle swayed for more than four years, and the French frontier there is a section which, while it lay under the German paw for four years, was not, generally speaking, fought over. Consequently, it has not been damaged to the same extent or in the same devastating way. The area in question contains the cities of Lille, Roubaix, Tourcoing, Armentieres, and Valenciennes—all important industrial centers. It also comprises a part of the coal-mining field as well as an important steel-making district. This area was, in fact, the most highly organized industrial region in France. A large part of its French population is still there.

It suffered damage in two ways. Cities were bombarded during the German retreat last October. Except in a few cases, like that of Valenciennes, the resulting injury was not irreparable. The most serious damage suffered by this region was by reason of the systematic pillage and the wanton, deliberate destruction carried out by the Germans during their four years of occupation.

But even where in isolated cases it would be possible to clear away the wreckage and rebuild an industrial plant, the work must be handled as part of a larger social problem. This is evident when one considers that, as stated above, in the region of the German occupation there is a large French population that must be provided with the means of livelihood.

Let me illustrate this point by citing the case of Lille. Its population is about 250,000. When the Germans evacuated Lille in October this population was left without either food or employment. The night our party ar-

rived in the city it was being provisioned with food brought all the way from Paris in motor trucks.

We were informed that the textile mills, for the most part, had not been irreparably damaged. What the Germans had done was to requisition everything they could locate in the way of copper, bronze, zinc, leather, rubber, and other raw materials of which they were in dire need. To obtain these materials they stripped the textile spindles and looms of their copper bearings, their leather belts, etc. At the time our party visited Lille most of this machinery was completely out of service.

Now, if the French problem of reconstitution were not so urgently and compellingly a human one, the French textile manufacturer might prefer to scrap his old machines and purchase new. But while awaiting delivery of the new plant what would become of the people of Lille and its environs? They must immediately be given employment; and so, wherever possible, spindles and looms are being repaired with whatever is available, so that work can be resumed, even though it be on an extremely inefficient and uneconomical basis.

Spare Parts Needed

LATER on, when the region of Lille has solved some of its more pressing human problems, the textile manufacturers will doubtless wish to purchase new textile machines. Just now, however, what is needed is spare parts for the machines that can be repaired and raw material to work on.

In the case of certain cities and towns which formerly were important commercially and industrially the French Government may have to decide whether it is justified, for the time being and under existing circumstances, in attempting to restore them at all. This is especially the case where the civilian population was long since evacuated and is now settled in other parts of France.

(Continued on page 82)

Walker D. Hines

Why the chief regret of our new Director General is that he was not born on a farm—being a quiet narrative for railroad men, lawyers, and patriots

By THOMAS H. UZZELL

THE most amazing fact about Walker Downter Hines is that he has become famous without letting anybody catch him at it. That's the kind of man he is.

The other day, for instance, he had his first interview with the newspaper men of

ingly effective by reason of its very simplicity and directness.

From his seventh year, when he made his first dollar selling tomatoes for his mother, to his sixteenth

shook hands with those members of the press who were not already his friends. Then he listened indulgently to queries designed to induce him to disclose the secrets of his success.

"What do you regret most in your life?" he was asked.

"That I was not born on a farm," he an-



Washington. The correspondents sat in a wide semi-circle, on chairs, perched upon tables and window-sills in the large, severely plain office high up in the Interstate Commerce Building. The new Director General through them was about to ask the people of the United States and their Congress for \$750,000,000 to help him finance needed improvements in the twenty billion dollars worth of railroad properties of which he is now in charge. And he had a very important case to present with regard to that expenditure.

The hour struck and the Director General entered the room. He walked straight to his desk, sat down, and without preliminaries or gestures of any sort, began to talk to the correspondents with such direct, pleasant-voiced persuasiveness that all present found themselves forgetting the man and listening to what he had to say. He won his case with those young men. The following day the newspapers of the country presented simply and lucidly the points of his argument.

With the same thoroughness and the same direct, unostentatious manner, in the last fifteen years, Walker Hines has been appearing in the highest courts of this country, arguing intricate railroad issues, several times summing up before the Supreme Court in masterful fashion the labors of batteries of other legal celebrities. His brief in the Minnesota and North Carolina Rate Case of 1908 is one of the finest ever written. Before the Interstate Commerce Commission he represented the anthracite carriers in the coal rate investigations, the Santa Fe in the famous Five Per Cent Case, the New Haven stockholders in the Commission's investigations of that road.

He has pleaded for all our express companies united against reducing their rates. In all these historic conflicts Mr. Hines displayed that modern legal eloquence which is overwhelm-



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year, when he became a short-hand reporter in the circuit court of his state, to his twenty-third year, when he finished a university law course in one year to his thirty-first year, when he was appointed First Vice-President of the Louisville and Nashville, he has always exhibited the same conscientious devotion to his duty, the same exhaustive thoroughness. He has a natural endowment of genius in a precocious mind; but the real secret of his wizardry in bringing order out of the chaos of thought is his method of studiously exploring any problem to its depths before attempting an answer. His zeal for getting facts first hand has often appalled men of lesser resolution. As one of his closest friends declares: "When Walker Hines quits a subject, it's finished."

The interview with the newspaper men was soon over. Mr. Hines stood up, smiling pleasantly. He appears to be medium in size and yet is tall, plainly dressed, smoothly shaven, square jawed. The sparse iron gray hair on the wide top of his head you are apt to find tangled, as though swept into disarray by the throes of thought.

His Chief Regret

ALTHOUGH his mind was already driving ahead into the new and urgent affairs awaiting his attention, his keen eyes and his glasses flashed good humor together, as he

swered promptly.

"But," pursued an interviewer, "you were born in Russellville, Kentucky; surely that town was small enough, wasn't it?"

"Well, I think every American boy ought to be born on a farm. He learns there first hand all about the simple realities of life. Even in a small village, you know, the milk is delivered to your doorstep."

There you have a passion for getting at the raw material of facts!

That passion and the quiet, modest way in which he has vaulted from one high responsibility to another have characterized his whole career. Every year, while chairman of the board of the Santa Fe, he journeyed from one end to the other of its continental system, picking up superintendents and station masters at each section line and quizzing them by the hour concerning the country through which the train sped. He astonished the station masters by remembering their names and the names even of prominent farmers and ranchers who lived in their sections.

Understands Melons and Authors

PASSING through the wheat belt, he talked crops with the farmers; approaching the Rocky Mountains, he wanted to know what the Rocky Ford melons were doing; winding through the mountains, he discussed the location of ores and the technic of mining.

Nor is his probing curiosity limited to railroad matters. Once, while passing Emporia, Kansas, he wanted to know if it were not about time for William Allen White to get out another book! If he remains long at the head of our railroads, the greatest unhappiness he will know will be his inability to examine every one of their 228,000 miles of rail.

Mr. Hines disclaims knowing of any "turning point in his career." "I just

drifted along from one thing to another!" That's the way *he* puts it! "I have sometimes had doubts," he adds, "whether I ought to be a railroad man or would not better be doing something else." Mr. Hines has never yet cultivated the acquaintance of the Man He Would Be. He's so busy being the Man He Is that he wouldn't know this other rainbow gentleman if he saw him.

Keeps Recreation In Its Place

ONE dramatic circumstance adorns the career of Mr. Hines. It brought him to New York and fame. While serving with the Louisville and Nashville, the road put its foot down on the fly paper of interstate commerce law. The foot stuck. The young counsel saw the feet of other roads becoming stuck. He sat down and mastered Interstate Commerce Law. When he got up, he knew it so well that he would have recognized it in China written in Esquimaux. And Mr. Victor Morawetz, retiring from the general counselship of the Santa Fe, said to his board: "We need some one who knows this interstate commerce law, and no one knows it better than Walker D. Hines." He came to New York. For twelve years no railroad felt that it could debate issues with that law without having Mr. Hines retained on its legal staff.

All of which has involved our unassuming Director General in an odd prank of fate. As a railroad counsel and official he opposed rates named by the Interstate Commerce Commission. He opposed any more railroad legislation at all. He declared himself against government ownership, saying that it would cause "delay in getting action from political or government railway managers." Now he is government manager of nearly all our roads and runs the job beneath the roof of the Interstate Commerce Building!

The somersaulting here obviously was done

by the situation and not by Mr. Hines. It all goes to show what a war can do to a country when it tries. It has set Mr. Hines to solve a problem more vast and baffling than any railroad man has ever faced before. And now he is at it at least ten hours every day—absorbed.

This, then, is the genius of the man: his self-discipline for complete concentration upon his work. His is a capital example of that perfect condition for the best mental output, which one of our great philosophers has called "the ability to work in the spirit of play." Ask him if he ever has any fun, how his game of golf is coming along, and he will smile and say: "O yes, I play golf sometimes, but I'm always the poorest player on the grounds. I can't play golf and work in the same month." As one of his friends confided in me, "Hines doesn't neglect his business, like some of us, to perfect his game."

"Nobody here remembers having seen Walker Hines play games," I am told in a letter received from an old friend of the Director General, still living in the Kentucky town where his boyhood was spent. "He was a youth without humorous episodes. He was always very studious. He was devoted to his little sister and worshipped his widowed mother who was a model southern woman and one of the very finest women God ever made."

Likes Boswell's "Johnson"

AND yet Walker Hines, take him the year around, is one of the most normal of American men of business. He has an ideal home life with a wife and a daughter of sixteen. He takes long walks when he can. On his vacation he rides a horse, sails a boat, or starts out in pursuit of one of those pestiferous golf balls. He was born with good health—and has conserved it. And he reads for amusement: one evening it is Bab Ballads, the next Boswell's "Johnson." He doesn't smoke. He sleeps soundly.

No, if you wish to know Walker Hines as he is, you must know him at work. If the aspiring youths of the coming generation are to have inspiration from his life, they will find there no log cabin birthplace, no chapter of picturesque cow-punching on the western plains, no dramatic moments of high wit or sudden daring. His achievement is something more modern, more difficult. Let them rather behold this episode which occurred when he was deeply involved in one of the most important rate cases ever argued before the Supreme Court. It well illustrates the Olympic perspective, the disciplined dexterity of his mind.

A Dictation Marathon

The case having been ended, Mr. Hines boarded the Congressional Limited in Washington with his stenographer. Settling himself down at once, he said to the latter: "I am going to dictate all the way to New York. I shall not have time to read your manuscript. Please see that the printer gets what I say." He dictated steadily hour after hour until only fifteen minutes were left him to put on his hat and coat before reaching the Pennsylvania Station. The fifty pages of manuscript, containing information of great moment to the railroad executives of the country, were printed and mailed without his giving them further attention.

Mr. Hines has "gone with the Government." Why? His sense of duty. And what is his sense of duty? I give it up. I doubt if he would consider the question either practical or relevant. His conscience is a queer sort of honor, of nobility, that somehow seems to make him "drift along" in the right direction with imposing rapidity.

Of Mr. Hines' ideas about government, however, we know more. He has defined them in public addresses. He believes with our fore-

(Concluded on page 60)

Our Imperious Comptroller

Congress may appropriate money until it is blue in the face, but this autocrat says how it shall be spent, and woe to him who fails to measure up to his ideas of punctiliousness

nine days for a later vessel he could have saved many miles of travel.

For his pains in trying to obey orders he got docked by the Comptroller in his expense account. Protests from the Secretary of War that it was dangerous business to have an army officer delay for nine days in performing a duty of urgency for the sake of a small saving in dollars, were to no avail. From the point of view of the pocket-book, the National Housekeeper could not see there was any such military urgency as all that.

Civilians get the same sort of treatment from this redoubtable housekeeper, and so discover to their cost that dealing with the Government is altogether a different affair from buying and selling with ordinary mortals. An unsuspecting business man may contract to sell horse-shoe nails to the War Department, and name the price on a basis of "f. o. b. Pittsburgh," following a custom that he and all other manufacturers of horse-shoe nails use every business day in their lives. Their purpose is the very plain business idea of having prices comparable wherever their factories may be. The delivered price is then, in the

usual case, ascertained by adding the freight rate from Pittsburgh to the point of delivery. On such an assumption the unsophisticated business man makes his price to the Government and delivers his goods.

The delivery is the "cue" for the Comptroller's entrance in the little drama. He scrutinizes the contract, wants to know how the price entered in the bill comes to be higher than the price written as "f. o. b. Pittsburgh," and then sternly declares that only the exact figure named in the bond may be paid out of the treasury. When he is told that "f. o. b. Pittsburgh" has a clear and different meaning well established among all men who buy and sell horse-shoe nails, and that this meaning was intended by both the manufacturer and the War Department, he serenely waves the matter aside with the assertion that "such a custom cannot be set up against the sovereign."

A Merrie Plight

THUS, the secret comes out. The sovereign has bobbed up again in our democracy, and he proceeds to play pretty much the same tricks on his liege subjects as in the olden days of Merrie England. To the subject who makes a wry face the Comptroller blandly suggests that he, the subject has a perfectly free choice—to take what the Comptroller offers or leave it and try his luck in the Court of Claims.

All Soldiers Look Alike

AS the government's housekeeper, he is a tremendous success. Without a qualm he will call to book any member of the household, and he scans with an alert eye every item of the monthly bills presented by tradesmen who supply the necessities of his establishment. Not so long ago, when most of the world was at war, an army officer received orders to proceed by the first available government vessel from one post in the Philippines to another. He took the first boat, whereas if he had waited

Dividends From Mining Laboratories

Is science a part of your mining capital? The Bureau of Mines searches the world for new ideas for you. And you—?

By AARON HARDY ULM

WHEN the Germans invaded France, the French peasant's wrath didn't reach fury supreme, someone has said, until the Germans began cutting down his trees. Even then he wasn't much madder than was a man we'll call J. Somerville, an American orange grower, who saw his orchards withering beneath showers of dust from a nearby cement mill.

"It must stop—it's gotta stop," declared Somerville as sternly as the French looked, and stood, at Verdun. It stopped, quite fortunately for all concerned and many not concerned.

When Somerville *et al.*, returned from court with a beribboned order directing that the nuisance be abated the cement manufacturers began really to think. That order, off hand, meant the abatement of the plant, and bankruptcy.

"Better call a doctor," one of the manufacturers suggested. An engineer came in response to a telegram, tapped the pipes, fingered the dust, and shook his head. The *materia medica* of engineering contained no prescription.

"Maybe Uncle Sam can help," said the engineer, and soon thereafter a telegraph messenger boy delivered the problem to the United States Bureau of Mines in Washington.

The problem attracted the Bureau of Mines, because it was new and involved an industry within the scope of the Bureau's activities.

Dr. F. L. Cottrell, Chief Metalurgist for the Bureau, packed his grip and crossed the continent to investigate. He found the cement makers quite down in the dumps. But the doctor jumped into a suit of overalls and with the engineer went to work.

A Profitable Nuisance

THEY hitched to the pipes an electrical precipitator the Doctor had devised for catching sulphur fumes issuing from copper smelters, and, lo, the nuisance stood abated.

Then with Sherlock Holmes prescience they sniffed the collected dust and consequently glared at each other in surprise. It contained a lot of potash! Not long thereafter the plant, and some other like plants, became potash mills, with cement as a by-product. A new source of precious potash, a source capable at the full of yielding 100,000 tons annually, stood revealed!

But that is only the introduction to the full story.

"Let's try the precipitator on a blast furnace," someone, perhaps Dr. Cottrell himself, proposed. Again it worked, with more potash as a result. Thereby it is possible for our iron blast furnaces alone to produce more potash



than we once imported from Germany, at a cost which may enable us to compete in the markets of the world with the mines of Europe.

Thus almost by accident, the sting was taken out of Germany's best economic lash and the base laid for a new industry already getting under way on a promising scale.

And because of it all, many a southern boy of the future may marry, settle down and till the soil instead of quitting famished land for the high lights of city life.

And that was why Dr. Cottrell was awarded the Perkin medal for last year's greatest achievement in the advancement of industrial chemistry.

Unlike the cement makers who called on the Government to break their gloom, an Oklahoma oil operator—we'll call him Thomas H. Sluce—was anxious for the Government to share his joys. Sluce had struck it rich. The petroleum he wanted was gushing in torrents from the holes he had bored through the outer crust of the land we love. But the Government specialist, who went from a nearby station of the Bureau of Mines, didn't pat Sluce on the back and call him a lucky patriot. Instead he denounced Sluce as an unpatriotic and almost criminal waster of nature's wealth.

A Knowledge-proof Skull

AS your wells stand," he told the operator, "you will recover 25 to 50 percent. of oil down there in the sands. The rest will be lost forever. Cement your wells and the recovery will increase 10 to 20 percent."

"Hell, I haven't time to talk about cement," Sluce replied in all good nature. "Look at the juice, man, look at it. Isn't it great? It means a bunch of coin to me, too. You doggoned scientific fellers get my goat."

The specialist laughed but his bespectacled stare didn't falter. He gazed into Sluce's eyes and declared, "Every dollar spent on cement will bring you a good hatful of dollars you wouldn't otherwise get."

Finally Sluce and others of his tribe submitted to an experiment conducted by the Government, at their expense. Fifty wells were duly encased with cement. Result: Flow of oil increased 2,000 barrels daily, meaning, for one year, additional oil worth \$1,640,000, oil that, but for the protection the cement gave against the corroding effect of water, would have been lost beyond possibility of recovery.

Thus the job of the Bureau of Mines, as its experts will tell you, is not to show people how to save at a loss, but how to save with profit by making efficient economical use of natural resources—and the heads *God gave us!*

Its special task, like that of other scientific establishments run by the Government, is to help industry think, particularly the little chaps in industry who cannot buy highly specialized thinking. Though what it does belongs to all alike, its big and costly laboratories and trained experts serve the little fellow somewhat as set-offs against the sometimes bigger laboratories and oft-times higher paid experts operated and employed privately by the big industrial organizations.

John Higginbotham, for example, with a face full of worries, and a throat full of grumble, wanders into the offices of the Bureau. He is a foundryman on a modest scale.

"I want you to get after those coal people out my way," he exclaims with heat resembling his foundry fires. Higginbotham is advised that the Bureau's function isn't to "get after" anybody, but to advise all—which it, through fuel experts, proceeds to do with him.

"Perhaps your coal merchant isn't blameless," he is told. "But unless you are a rare exception, you too, are partly to blame."

"In the first place you shouldn't buy coal as coal if you can avoid it. You should buy it as heat. That means buying coal on specification, and paying for what it contains, instead of for what it weighs. We do it that way for the Government and many big enterprises have followed suit."

"But I have to take what I can get," exclaims Higginbotham, whose establishment is so located that its coal must come from a single community or mine.

"Then learn the qualities of the coal, preferably by having it analyzed, otherwise by data we may be able to give you. We can't analyze it for you, but here's the record of thousands of analyses we have made for the Government. It will probably throw considerable light on the kind of coal turned out by the mine or community which supplies you."

"What good will that do me?" asks Higginbotham, cynically.

"None at all unless you see that the coal is given the treatment its peculiar qualities require. It must be burned with due attention to those qualities. Coal and furnace should be attuned like the lead fiddle's strings with a singer's voice. One coal needs so much combustion space and so much air, and another needs less or more. Here's some data on that."

Profits In Coal—Unburned

MR. HIGGSITH, you must learn the unbeaten road from business office to stoking room. A careless fireman, by not giving intelligent attention to his job, can cost you \$20.00 a day in wasted coal. You say that you have installed automatic coal-saving appliances. Many of them have merit, but nothing, Mr. Higginbotham, will take the place of intelligent attention."

Director Manning happens by and gives Mr. Higginbotham some general facts about the waste of coal.

"Even the most efficient power establishments," says the Director, "don't turn more than twenty percent. of the heat in coal into actual power. I should say that the average for the small establishments is less than ten



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percent, and that for all users of coal only five or six percent.

"So the man who gets all that is procurable out of coal makes just that much more money, and has that much edge on his competitors, as well as conserving our coal supply!"

And he tells Higginbotham about the results of furnace experiments made by the Bureau at its Pittsburgh Laboratory, and of new principles of combustion discovered, and how they may be utilized with profit even in operating a household furnace.

"Mostly scientific buncombe," sneers Higginbotham, who rose from the ranks and is therefore, intensely "practical." "It reads good on paper, but it won't work, not much."

"High-class engineers who designed furnaces for the Emergency Fleet Corporation probably had similar suspicions," the Bureau's combustion experts interrupt to say.

"They asked us to make some heat tests for them. In making the tests we noticed that some principles developed by the Bureau had not been taken into account in designing furnaces for our ships. The principles were so simple that your fireman could easily grasp them. One, for instance, is based on the fact that you can't force through a burning coal bed, sufficient air to insure perfect combustion.

"Well, they tried out our suggestions and now six tons of coal do the work of seven on every ship of 6,000 tonnage built by the Government, meaning a saving of about \$350 on coal for each ship's journey to Europe and back."

Higginbotham then begins to evince real interest.

"We are glad you came here where men who often spend weeks and even years working on a problem that may be only incidental to you but big in its total relations, can talk to you," they go on. "It shows that you are progressive. Industry as a rule will average ten to fifteen years behind science."

PROFS. COME HERE FOR KNOWLEDGE

HIGGINBOTHAM feels better when they tell him about professors in one of the best technological schools sending the Bureau a paper for approval.

"We cannot endorse your paper when it shows that you were unaware of facts made plain in our bulletin No. —," they wired back.

And the paper was completely revamped.

Higginbotham goes away determined to translate his part of our annual coal waste—amounting, says the Bureau, to 150,000,000 tons, worth a half billion dollars—into cold cash.

It is quite a leap from coal and furnaces to the clay found in the "red old hills of Georgia" about which southern poets, from Richard Henry Wilde to Frank L. Stanton, have sung.

William Barnett, being more of an industrial than a versifying poet, wondered if beds of the clammy stuff scattered around his many acres and which defied his plows wasn't good for something more utilitarian than rhyme. Authorities told him the clay was kaolin of a low grade suitable perhaps for making jugs and maybe the kind of dishes we use sometime when company isn't expected.

Barnett, as we call him, sent a bag of it to the ceramics experts of the Bureau of Mines. The Bureau was interested for the problem presented affected an industry and an art dependent largely if not wholly on imported raw materials. Its solution also meant much to a section as richly endowed with kaolin as with

poets. So the Bureau went to work among the beds of kaolin to see if the clay couldn't be made available for the best porcelain. It set up a little plant and its experts worked for three years before light came.

THE FUTURE OF RED CLAY

LOOK at this," they say, handing you a bas-relief medalion of Franklin K. Lane, Secretary of the Interior. The bit of work in ceramics suggests Limoges, or Dresden. It is the result of a newly-discovered method for treating Georgia and South Carolina kaolin so that it may be turned into chinaware fit for a connoisseur.

"And at this?" perhaps they will say, as they take you to another office, and disclose a speck of mineral that blazes like the eye of an

the engine in your runabout.

Its major operations center at Pittsburgh, where in addition to a laboratory, including experimental furnaces, it operates an experimental mine, and a bomb-proof for explosive tests. Distributed throughout the country from Alaska to Texas, are a score or more service or experiment sub-stations.

They will tell you at the Bureau how they search the world for ideas, which they freely develop. They also hunt for appliances needed in the mineral and allied industries and develop many like the recently announced rocking electric furnace for melting brass. It, like all other inventions, is protected by Government patent, but may be manufactured and used on license, which requires that all improvements, like the original, shall be common property.

The Bureau's work with mine gases enabled our Government to begin, even before war was declared, to build around a nucleus of Bureau experts the best gas and gas-mask organization any country possessed.

The gas-mask, like other things developed under the stress of war, is being turned to the uses of industry. It enables workmen to go ahead with work or repairs sometime for hours, when heretofore, a leaky pipe emitting poisonous gases often made five minutes' exposure to fumes fatal. Likewise the geophone and microphone, listening instruments developed in the war and used for finding hidden enemies, are to be employed in locating entombed miners.

The big idea behind the Bureau of Mines—which by the way propagated the "Safety First" slogan—might be stated by the word "Save."

"We ask no man to turn philanthropist," they say at the Bureau. "We test every theory by the question, 'Will it pay?' We endeavor to show the miner that precaution against disaster is highly profitable, and it so proves in practice as the curve of mining insurance rates will indicate. We try to show the manufacturer how sufficient use of fuels and materials will add to his dividends, as well as conserve our natural resources. We are not visionaries or impractical idealists.

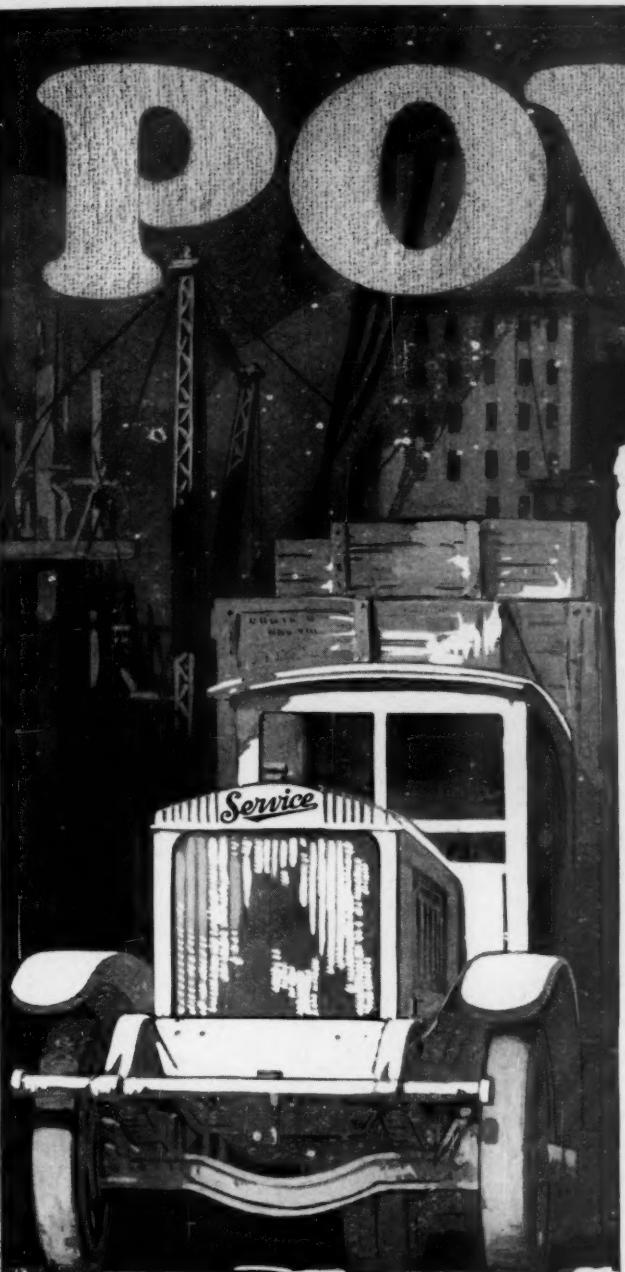
"The only qualifying test applied to problems brought to us is that they be within our field, be new, of interest to an industry or a section, and that their solution be of assured value now or in the future.

"We try to help industry think, save, and profit by it. Bear this in mind, however! Neither we nor anybody else can do another's thinking. We can only supplement it; we cannot supplant it."

[This is the second of a series of articles showing the way in which various government bureaus in Washington are helping to promote business. The first one from the Bureau of Standards appeared in the December issue. Others are in preparation.—THE EDITOR]

WOMEN were employed in large numbers in many manufacturing plants during the war. Now that the war is over manufacturers are up against the problem of retaining them or letting them go to make room for men.

A Chicago ice cream manufacturer, thirty-five percent. of whose working force is composed of women, declares he will retain all women workers, although he intends to make room for every member of his force who was called to the colors. In his line of work women are more thorough and particular than men.



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An Open Door of World Trade

Because the "open door" has sometimes been closed when the entering trading guest was not looking, thus pinching his fingers, all nations must now remove that door from its hinges

By WILLIAM S. CULBERTSON

United States Tariff Commissioner

THE principle of the open door does not imply free trade nor even low or revenue tariffs. It implies actual equality and uniformity of treatment in import and export duties, harbor dues, customs regulations, distribution of raw materials, and opportunities for investments or concessions. It may be made applicable in any dependent colony or even in a country, such as China or Persia, where outside governments are backing the commercial and financial interests of their nationals in their competition for trade, investment or concessions.

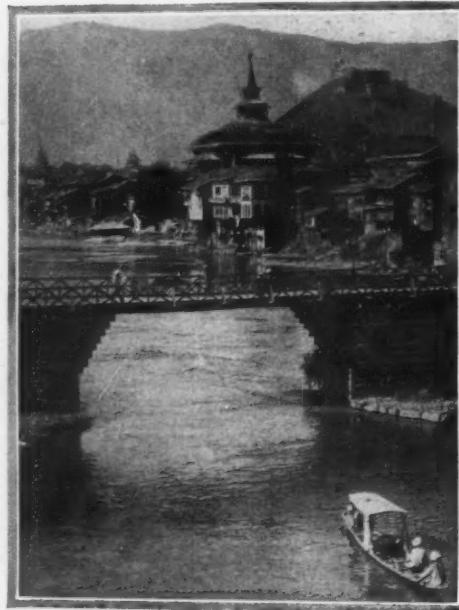
Old and New Colonialism

THE old colonial system of the 16th and 17th centuries was based on monopoly, exclusion, and the "closed door." Colonies were conceived to exist solely for the benefit of the mother country. Mercantilist statesmen looked upon them as a means of enriching the nation.

The latter part of the 19th century witnessed a revival of colonial policy as epochal in its importance as the old colonialism. It came as one of the results of the later phases of industrial revolution. Mechanical invention and business organizations increased production; goods were exported to foreign markets; capital accumulated and sought investment. Colonies, protectorates, and spheres of influence became desirable. Politics began to interest itself in the commercial and financial conditions of distant countries.

The "open door" is the antithesis of the policy that colonies exist for the exclusive benefit of the mother country. It recognizes the interests both of outside nations and of the colony itself. It establishes the principle that no nation, because of political control or military power, has a right to exclude other nations from participation in the economic development of the less advanced parts of the world. Never has there been a better time than now to adopt this principle. Much of the difficulty of the open door policy has resulted from a failure to recognize and acknowledge its full implications. In many quarters it has received lip service, but in practice has either been evaded by secret devices or modified by so many exceptions that it has become little more than an aspiration.

The conclusion must not be jumped at that, because international conferences, diplomatic notes and treaties have proclaimed the open door, the door has remained open. I cannot too strongly emphasize that it is the secret and concealed influence of governments working in or cooperating with trading companies and nominally private concerns which hold railroad, mining and timber concessions that present the most serious menaces to equality of commercial and financial opportunity.



Dutch Door is Open

SINCE tariffs have played a large part in the discussion of the open door policy, it may be profitable to examine a few of them. The Netherlands may be mentioned first, since their colonial empire is one of the oldest and since, so far as the published tariffs show, there are no preferences. The Dutch possessions are in the East and in the West Indies. Java is the

ANARCHY, before the war, reigned almost supreme in international trade relations. Because there were no international standards of competition, the only restraints on unfair practices by great export syndicates were those exercised by nations, and they were ineffective.

An international trade commission could be of great service in making competition between nations fair.

most important colony. The open door prevails in the colonies and the low revenue tariff of the mother country gives no special advantage to colonial products.

Recent British Preferences

ALL the dependent colonies of Great Britain, including India, have import tariffs embodying the open door principle. Great Britain, however, has recently levied export taxes on palm kernels, raw cocoa, and jute when exported from West Africa and India, and these taxes are remitted if the exports go to any portion of the British Empire.

Reference should be made to the preferential tariffs of the self-governing British dominions, although their tariffs do not technically belong to a discussion of the open door, since they are entirely independent in their fiscal

policy. Discussion of them is more relevant under most-favored-nation treatment.

These preferences within the British Empire are justified, it is said, on the ground of political and sentimental ties. They are, it is claimed, purely of domestic concern. But the same claim might be made for discriminatory reciprocity treaties between nations. Should the arrangement between the United States and Brazil be considered objectionable from an international standpoint, equally so are British preferences.

German Colonial Policy

GERMANY entered late into the race for colonies. She was inspired to enter from many motives, but chiefly because of the desire for commercial advantage. Other industrial countries had tropical and sub-tropical colonies which supplied raw materials and which furnished markets and opportunities for the investment of capital.

The published tariff rates of German colonies show no preferences. German goods received no preferences in the colonies; colonial goods received no preferences in Germany. But the question may be raised: Were there any concealed preferences, and if not, what motive led Germany to pursue an open door policy?

Preferences may be concealed by arranging the free list in order to exempt from import duties articles predominantly of German origin; by placing relatively lower duties on goods which are important in the commerce between the colonies and the mother country; by administrative regulations which, although apparently applying to all equally, favor German goods. On such practices evidence is very difficult to obtain, but it seems safe to say that there is no evidence that Germany ever closed the door in her colonies.

Connected with Article IV of the Treaty of Paris, which, in 1898 brought to a close the Spanish-American War, occurs probably the first mention in American diplomatic correspondence of the words "the open door." In the protocol the American commissioners said:

"The declaration that the policy of the United States in the Philippines will be that of an open door to the world's commerce necessarily implies that the offer to place Spanish vessels and merchandise on the same footing as American is not intended to be exclusive."

No tariff discriminations were inserted in the tariff legislation on imports adopted by the United States military authorities for the Islands. Certain preferences were allowed, however, on raw materials exported from the Philippines in which certain manufacturing interests of the United States were involved. Upon the production of evidence of consump-



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tion in the United States, the Philippines export taxes on hemp, copra, sugar, and tobacco were refunded.

The United States Tariff Act of 1909 established free trade between the Philippines and the United States with a few exceptions (which were omitted in the tariff act of 1913); that is, no import duties were to be assessed on domestic products of either the United States or the Philippines when entering the ports of the other. Thus Congress definitely abandoned the open door policy.

Something should be said as to the economic effect of preferential arrangements, and our arrangement with the Philippines may be used to illustrate tendencies which are present in all the preferences which we have considered.

In the case of those commodities in which the imports from the United States into the Philippines would not dominate but would, nevertheless, be substantial, the provisions of the Philippine tariff act would be a subsidy to the American exporter at the cost of the Philippine consumer. Philippine prices would be determined by the product which had to pay the Philippine tariff duty.

Where Preference Hurts

ON American commodities which, because of their superiority in quality or price, dominate the Philippine market, the result of the tariff would be negligible; the tariff rates on foreign products would be merely nominal, and the articles would sell in the Philippines on the basis of free imports, provided, of course, there is free competition. American products which were dearer than foreign commodities, yet able, by virtue of the tariff preference, to displace them in the Philippine market, would command a higher price in the Philippines than would be the case if imports from all countries were free. In this case the Philippine consumer would lose, without there being any compensation in increased revenue to the treasury of the islands. Whereas the highness or lowness of a tariff should be determined solely with regard to the interests of the people

directly affected, preferences in tariffs (and in other commercial and financial matters too) are international problems. They are necessarily subjects for international discussions and perhaps decision.

The industrial value of preferences to the favored nation, and the material injury to the excluded nation have no doubt been exaggerated. Nevertheless, the nation discriminated against it aggrieved. Suspicion arises. Retaliation is planned and put into effect. Trade wars follow and bitterness and hostility are engendered between peoples.

It can no longer be said that a special discriminatory treaty between two peoples is their concern alone. Nor can it be said that preferences between a nation and its colonies are purely domestic problems. To take such a position is simply a refusal to face squarely one of the most fruitful sources of international friction. The disposition of the subject depends fundamentally upon the spirit in which nations come together for the consideration of preferences.

If the spirit is that of selfishly seeking to hold to every material advantage that political power for the moment makes possible, no substantial progress will be made, and the world will settle back into the old fatal circle of discriminations, trade rivalries, hostility, and war. If, however, nations recognize that they are faced with the need for revolutionary action; if the spirit which guides is that of a willingness to give up something in the interests of world peace, we may hope for a genuine solution of the perplexing problem of discriminatory barriers.

No nation should be asked to act alone in the abandonment of preferential or discriminatory measures. Such measures should be abandoned by all the powers by general agreement. This action, as we have seen, has been taken

for limited areas. Is it too much to hope that one of the results of the war will be its universal application?

If there is one thing that the war should end forever, it is colonial monopoly and the exploitation of outlying parts of the world by nations which control them politically. Colonies should be regarded, and are regarded by the most advanced nations, as trusts which they are called upon to administer. Preferences enjoyed by the trustee are inconsistent with the trusteeship.

Concealed Discrimination and Exceptions

CONCEALED discriminations have led some public men to despair of the general application of the open door principle. They have said with considerable justification that nations which carry out their international obligations in good faith are at a disadvantage in competition with nations which do not hesitate to evade the spirit, while accepting the form of the open door principle.

Concealed discriminations may be made in tariff classifications by which products which are peculiarly the product of the mother country or colony are favored under an appearance of equality; in undervaluations of home products; in customs regulations; in port and navigation rules; and in the even more subtle way of financial and political control. A government may even disguise its discriminatory policy by operating through nominally private banks and corporations.

Faced with these conditions some public men have proposed to abandon the equality of treatment principle and to attempt the use of retaliatory measures for the purpose of removing concealed discriminations by other nations. Such a step, however, is not progress. Rather should the nations, recognizing the desirability of the open door principle, make it effective by devising as a supplement to it machinery which will ferret out and bring into

(Continued on page 58)



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Longer, Wider, Higher Taxes

A thorough analysis of the new revenue bill as it affects the business man and his corporation

FIGURING" will be the great American pastime this year as never before, and information about the subtleties of the new federal revenue law will be an open sesame throughout the land. City visitors will be unusually welcome in the rural districts, on the chance that they may know whether or not obsolescence is permitted on account of aging horses, or anything can be deducted for depletion of the wood lot and wear and tear on the hill pasture or the self-binder.

Opportunities for profitable figuring have grown; many of the subtleties and refinements in the new law merely get to the heart of things. When they are elaborated in regulations the new law should be the easiest we have yet had to apply in definite ways.

Income Rates

BUSINESS interest has centered upon the provisions that mean equity or inequity. Rates have been of secondary importance. In computations of the tax, however, they again become vivid. The normal income tax and the income surtaxes fall on individuals, including partners, who are treated as individuals, and stockholders in personal service corporations. Upon the first \$4,000 over the credits that are allowed the normal tax for 1918 is 6%, and upon any further amount it is 12%. For 1919 and following years these rates drop to 4% and 8%.

The surtaxes begin with 1% on \$5,000 to \$6,000 of net income, without the credits being deducted, and upon each \$2,000 over \$6,000 they increase by 1% to 48% on \$99,000 to \$100,000; beyond that figure they proceed more irregularly and by much larger amounts to 65% on the excess of net income over \$1,000,000.

Corporations have their own income tax—12% for 1918 and 10% for 1919 and following years. Such troublesome affairs contained in the old law as the possible tax on earnings carried to surplus have disappeared.

Since personal exemptions remain as last year, the income tax for a married man without children and in a usual situation works out for 1918 as:

Net Income	Tax	Percentage
\$3,000.....	\$60.....	2%
6,000.....	250.....	4%
12,000.....	1,150.....	9 1/2%
20,000.....	2,630.....	13%
40,000.....	7,730.....	16%
200,000.....	101,030.....	50%
600,000.....	377,030.....	63%
1,400,000.....	963,030.....	69%

Special Rates

OUR earlier tax laws have not taken into account many situations which vary from the humdrum course of events. A prospector who had spent many lean years, eventually developed a mining property, and sold at a good figure, discovered to his dismay that his success had come in a year of high rates, and had very little left for his years of toil and hope.

Under the new law, when a man has by his work demonstrated the value of a mine or oil well, and sells, the income surtaxes are not in any event to take from him more than 20% of the selling price. In addition, of course, he will pay the normal income tax.

The hardships upon companies mining gold, with their product at pre-war prices for the sake of the monetary standards of leading countries, but with their costs increased to war levels, are recognized. Their income derived from gold mining is entirely free from the profits taxes.

Railroad companies under federal control, which have to pay war taxes out of their corporate funds—*i. e.*, cannot charge them in operating expenses—are to pay income tax of 10% for 1918 and 8% for following years, instead of the 12% and 10% paid by ordinary corporations, but they are subject to profits taxes at the same rates as any other corporation.

Personal Service Corporations

THE personal service corporation makes its appearance as a new kind of enterprise. It was devised in the process of getting away from the defect of last year's law, which imposed a war excess profits tax even upon "earned" income while letting "unearned" income off without the extra levy. The first step was to free individuals from the profits taxes. The next was to release partnerships from them. The final step was to invent the personal service corporation as a means of diminishing inequalities between partnerships and small corporations.

The attempt is only partly successful, as it affects chiefly concerns offering professional or agency services. To come within the definition a corporation must have its income ascribed primarily to the activities of the principal owners in the business and not derived to a material extent from capital. If as much as half the profits come from trading as principal, a corporation passes out of this class and into the category of those that must face profits taxes.

At the same time, it is recognized that a corporation may be engaged both in activities which belong to a personal service corporation and in a separate business in which capital is a material income-producing factor. In such an event, income derived from these separate sources may be segregated and one part treated as if there were nothing but a personal service corporation and the other part as if there were an independent business corporation. This is an example of several situations in which a corporation may split up its income for treatment in different ways.

Personal service corporations begin to get their advantages as of January 1, 1918. If they come into the reckoning before that date they are treated like other corporations.

Inventories

WITH a peak of high prices for most commodities in 1918, inventories play a large part in computations of taxes. Many large

profits have disappeared into high-cost inventories, which may have eventually to be liquidated at loss. Possibilities of this sort are contemplated. In the first place, the Commissioner of Internal Revenue is given enlarged powers to prescribe methods of inventory which will, in each trade or business, most clearly reflect income.

If in the calendar year of 1919, or any fiscal year beginning after October 31, 1918, and ending before January 1, 1920, there is a net loss in any regular business, or in disposing of war plant or equipment, this net loss is to be taken into account in a redetermination of the taxes paid for the preceding year, and a credit or refund is to be made accordingly.

A net loss for the calendar year is not necessary, however, in order that a taxpayer may get relief as to 1918. When filing a return for 1918 a taxpayer may claim abatement because of losses shown on his inventory by current prices, or because, in accordance with contracts, he has given rebates on sales made in the year. The tax is then to be held in abeyance until the justness of the claim is determined, but the taxpayer is to file a bond in double the amount of the tax involved and is to pay interest at 1% a month on the tax for the part of his claim that is disallowed.

Without filing such a claim with the return for 1918 a taxpayer can later show a loss sustained during 1919 and then have his tax for 1918 redetermined.

Dividends

STOCK dividends representing earnings accumulated at any time since the end of February, 1913, are treated like cash dividends, with one exceptional case; if they were received in 1918 before November 1, or were declared in that part of 1918 and paid within 30 days after approval of the new law by the President, they are taxed to the recipient at a little less than the full rates for 1918. Although they are stated at one point to be taxable at the rates of the year in which the corporation made the earnings which they represent, this does not mean the rates of earlier laws. The rates of surtaxes to be used are those of the new bill, which provides that, if taxes are to be levied as in earlier years, the proper procedure is to use the schedule of surtaxes in the new law and to place income taxable, for example, as of 1917 in the next to the lowest bracket, that to be taxed as of 1916 in the next higher bracket, and so on.

Otherwise, all dividends are taxed to recipients at the rates for the years when they are received, but with a new provision which has effects that apparently can be made clear only through regulations of the Treasury Department. The provision is that dividends distributed in the first sixty days of the calendar year are to be considered as paid from earnings of earlier years. It would seem that if a recipient of dividends received, say, in January or February, 1918, actually placed them in his accounts for 1917 he would escape the first bracket of the surtaxes imposed by the new law.

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This provision respecting dividends distributed in the first sixty days of the calendar year may have some effect, too, upon taxes paid by corporations from which such dividends are derived. If the dividends were earned in the sixty days, they might be taken as corporate income taxable at the income rate for the preceding year. They would have an effect also upon corporate net income and upon invested capital for purposes of the profits tax. Thus, the greatest result of this provision may eventually be found to be to cause corporations which make dividend payments in the first two months of 1919 to pay profits taxes proportionately at the higher rates for 1918. As has already been said, however, there is need of clarification of this provision through regulations, which will undoubtedly appear in the near future.

On behalf of corporations which receive dividends from companies which have already paid taxes the earlier difficulties, which resulted in double taxation to an extent, have been removed. The receiving corporation will not now pay tax upon any such dividends.

Fiscal Years

MANY features in the law expressly prevent its new provisions being retroactive before January 1, 1918. For example, there is new language about the method of computing taxes for fiscal years that include parts of 1917 and 1918. As the bill stood at one stage, there was a chance for a man to take advantage of all the deductions allowed in the new law in arriving at his net income for such a fiscal year, and merely divide the amount proportionately for computation at the different rates.

This form of special advantage disappears. A taxpayer is to compute the net income for the whole fiscal year according to the law of 1917 (*i. e.*, the combined laws of 1916 and 1917) and compute tax at 1917 rates. He is then to do likewise with the new law. Of the result of his first computation he is to take the part corresponding to the portion of his fiscal year falling in 1917 and of the second computation he is to take a part arrived at in a similar way. His actual tax will be the sum of these two parts.

Returns—Installment Payments

RETURNS when made for the calendar year are due not later than March 15, with power in the Commissioner of Internal Revenue to grant extensions. As yet the Commissioner has not formally granted a general extension, but he has announced that an estimate of taxes may be used on March 15, one-fourth of the amount paid, and any inaccuracies adjusted before the second installment is due, on June 15. Other dates for payments of taxes by installments are September 15 and December 15, when payment is for the calendar year, with the dates correspondingly changed for a different fiscal year.

War Contracts

WAR contracts mean high profits, in the philosophy of the law. A company which otherwise would have the advantages of a personal service corporation loses this chance if half its profits come from war contracts.

Even people with "informal" contracts of the sort the Comptroller of the Treasury after the armistice ruled against *en masse* are to be treated as real war contractors, at least if the language used in the new law proves sufficient.



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It refers to contracts which originally were not binding on the United States but which may be made enforceable by reason of subsequent validation through a new law. It happens, however, that the bill which is on the way to becoming law regarding agreements of the War Department does not authorize any validation. The failure of the two bills to coincide in language grew out of the circumstance that one was perfected before the other reached its final stage.

Whereas ordinary corporations are relieved from the war-profits tax in 1919 and following years, remaining subject to excess-profits tax, a corporation which in these later years has a net income exceeding \$10,000 from government contracts which it obtained before the armistice, and after war was declared on Germany, will as to any profits from the contract in these years pay war-profits tax. In getting at this tax such a corporation will allocate to the profits from the contract such a part of its deduction as the Commissioner of Internal Revenue may allow, and then proceed, first, to

compute the tax on its whole net income at the profits rates for 1918 and, second, to compute the tax on its whole income at the rates for 1919. Next, it will take the part of its first computation corresponding to the percentage of the profits from the contract to its whole net income and the part of the second computation represented by the percentage of its earnings from sources other than the government contract. By adding these two amounts it will have its tax.

If anyone thinks such computations are a hardship upon persons not mathematically inclined, he can have comfort in the recollection that he will not need to engage in this particular portion of the figuring for twelve months. When he gets around to it, he will probably find the law works out about as follows, for a suspicious corporation:

Net income in 1919 from government contract of war period	\$200,000
Net income in 1919 from other sources	800,000
Total net income for 1919	\$1,000,000
Profits taxes on entire net income at 1918 rates	600,000
Portion (one-fifth) corresponding to income from government contract	\$140,000
Profits taxes on entire net income at 1919 rates	300,000
Portion (four-fifths) corresponding to income from other sources	\$240,000
Tax actually payable for 1919	\$380,000

A corporation which has half its net income from war contracts and which was not in existence before 1913 also suffers some detriment in connection with the profits taxes; for its war-profits credit cannot exceed \$3,000 plus 10% of invested capital.

The law expresses a special dislike for cost-plus contracts with the government. If a corporation has half its gross income from such a contract made in the war period, it does not have the opportunity of other corporations to show abnormal conditions affecting capital and

income and have taxes which bear the ratio to its net income shown by the average tax of representative corporations engaged in a similar kind of business.

King Amendment

A PROVISION placed in the bill by the Senate caused misgivings about the amount of work it would entail, without any obvious advantage to the government. It would have required every war contractor and subcontractor to file both with the Commissioner of Internal Revenue and with the Attorney General copies of all his contracts, together with most elaborate statements of expenditures and receipts. This was eliminated, and instead a short section was inserted for the purpose of indicating that the Commissioner may have a copy of a contract, when he wants it, and can obtain data regarding it from other departments of the government, so long as he does not delve into military secrets; in partic-



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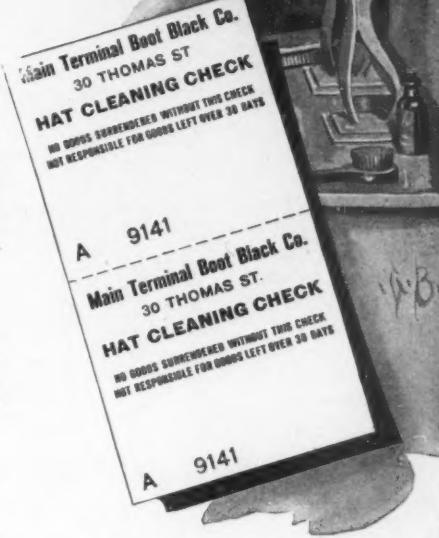
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ular he may ascertain what amortization, etc., has already been allowed to the contractor by the government.

Profits Taxes

THE "war excess profits tax" of last year gives way to "war-profits and excess-profits tax." Like the title, the tax is complex. It has to be reached by a formula. The formula is that the tax for 1918 may be the sum of three different amounts, in the course of computing which several incidental processes of addition and subtraction are required. The three amounts are:

- (1) 30% of the amount of net income in excess of the *excess-profits credit* and not in excess of twenty percent. of *invested capital*,
- (2) 65% of the amount of any remaining net income;
- (3) Any sum further necessary to bring the sum of (1) and (2) to 80% of the net income in excess of the *war-profits credit*.

For 1919 and later years the formula has only two parts, and the war-profits principle disappears. In these years this tax will be the sum of

- (1) 20% of the net income in excess of the *excess-profits credit* and not in excess of twenty percent. of *invested capital*, and
- (2) 40% of any remaining net income.

Restrictions on Rates

AS one of several devices placed in the bill to prevent corporations of approximately the same size paying very different taxes, merely because a dividing line in the rates happens to run between them, a limitation is inserted, to the effect that the profits taxes for 1918 cannot take more than 30% of net income between \$3,000 and \$20,000 plus 80% of net income exceeding \$20,000. For 1919 these limiting percentages are smaller by one-half.

The effect of the limitation for 1918 may be illustrated, as follows:

Invested capital.....	\$50,000
Net income in 1918.....	30,000
Pre-war rate.....	10%
Profits taxes without limitation.....	\$16,800
Limitation:	
30% of \$17,000.....	5,100
80% of \$10,000.....	8,000
	13,100
Amount saved by limitation.....	\$ 3,700

Men who by their efforts have developed mines, oil wells, or gas wells, and then sold, are protected by a provision that the profits tax cannot take more than 20% of the selling price.

Special Cases

THAT invested capital is not always easy to compute, and that it is not always equitable to base a tax upon it, the law recognizes more fully than last year. It sets out three situations in which the Commissioner is to disregard the regular method of arriving at the profits tax and instead is to levy a tax which will bear the same ratio to net income in excess of \$3,000 as the average tax of representative corporations engaged in a similar business bears to their income, and in doing this he is to take into consideration all relevant factors, including profits per unit of business transacted. He is to follow the same method as to corporations organized in foreign countries but doing business here, *i. e.*, they are to pay the same part of their net income as their American competitors.

THE NATION'S BUSINESS

The three situations are: (1) where he cannot determine invested capital in the light of the law's provisions, (2) where he cannot properly segregate a mixture of tangible and intangible property paid in for stock, and (3) where, because of abnormal conditions of capital and income, a tax computed in the regular way would work exceptional hardship as evidenced by comparison with taxes paid by representative corporations in similar business.

If the tax computed by the Commissioner according to this provision exceeds 50% of a corporation's net income, the corporation is to compute its first installment as on 50%, making adjustments later; but if the first installment actually due should later be determined to be greater than was paid, interest at 6% a year is payable upon the excess to the time of the actual adjustment.

There are also special provisions for reorganizations, and for corporations which before July 1, 1919, take over the business of a partnership or individuals.

The Credits

ABOUT the net income upon which profits taxes are computed there is nothing peculiar; it is the same as net income when computed for income tax. But there are, it will be noticed, three special factors entering into the reckoning—the excess-profits credit, the war-profits credit, and invested capital.

The excess-profits credit is simple, being \$3,000 plus 8% of the invested capital.

The war-profits credit is more complex. In the ordinary case it is \$3,000 plus the same percentage of invested capital as the average annual percentage earned by the corporation in 1911, 1912, and 1913. In these years, however, a corporation may not have been in existence, or it may have had low earnings or none at all. To meet these situations the credit may be figured as \$3,000 plus 10% on the invested capital, in the event earnings were low, and \$3,000 plus the rate earned in the pre-war years by corporations engaged in a business of the same general class, if the corporation came into existence after 1913. In arriving at averages for use in the latter case the Commissioner of Internal Revenue is to determine and publish "medians," according to returns filed for 1917; before he makes public the medians, a taxpayer for temporary purposes would take 10%.

A new corporation will not have advantage of using a median if a majority of its stock as now owned by a corporation in existence during at least one year of the pre-war period.

Invested Capital

THE elements allowed to be counted in invested capital have raised many questions. The definition of the new law is retroactive, being expressly applicable to any year.

The definition is now somewhat liberalized. Tangible property paid in for stock, but at this time worth more than the par value, may be included, the excess going in as surplus, but the Commissioner is to keep complete records of all cases where advantage is taken of this privilege and, upon resolution from either House of Congress, is to furnish all details without regard to the general injunction of secrecy as to such matters. The permissible amount of intangibles is raised from 20% to 25% of the par value of stock outstanding at the beginning of the taxable year, but this increase may be offset by inclusion of patents and copyrights as intangibles. Any amount in surplus may now be counted, even though it is not employed in the business.

Some Computations

THE law levying profits taxes contemplates such a variety of situations that the forms for returns are sure to be elaborate. A few of the situations may be illustrated by hypothetical cases.

Simple Cases

Invested capital.....	\$100,000
Pre-war rate.....	20%
Net income in 1918.....	60,000
Excess-profits credit:	
\$3,000 plus 8% of \$100,-	
000.....	\$11,000
War-profits credit:	
\$3,000 plus 20% of \$100,	
000.....	23,000
First bracket of tax:	
30% of \$11,000, \$20,000,	
<i>i. e.</i> , 30% of \$9,000.....	\$2,700
Second bracket of tax:	
65% of \$40,000.....	26,000
Third bracket of tax:	
Amount necessary to bring sum of first two brackets to 80% of excess over war-profits credit, <i>i. e.</i> , 80% of \$23,000—\$60,000— <i>i. e.</i> , 80% of \$37,000, which is \$29,600.....	900
Profits tax.....	\$29,600

If the net income for 1918 had been larger, the third bracket might have had more effect, thus:

Invested capital.....	\$100,000
Pre-war rate.....	20%
Net income for 1918.....	100,000
Excess-profits credit.....	11,000
War-profits credit.....	23,000
First bracket of tax.....	\$ 2,700
Second bracket of tax.....	52,000
Third bracket.....	6,900
Profits tax.....	\$61,600

On the other hand, if income for 1918 had been smaller the third bracket might not have had any effect, thus:

Invested capital.....	\$100,000
Pre-war rate.....	20%
Net income for 1918.....	30,000
Excess-profits credit.....	11,000
War-profits credit.....	23,000
First bracket of tax.....	\$ 2,700
Second bracket of tax.....	6,500
Third bracket of tax.....	
Profits tax.....	\$ 9,200

The third bracket does not come into play in the example just shown, for the reason that the sum of the amounts under the first two brackets is already more than 80% of the excess of the net income over the war-profits credit.

Congress and the Business Man

NOw that the new revenue bill has become law, the Treasury has turned its attention to legislation in preparation of the Victory Liberty Loan—our fifth issue of bonds since the war began—which is to be offered in the first three weeks of April. This will probably be the last loan issued by the Government in the open market, but will by no means end the Government's borrowing;

(Continued on page 78)



City Hall, Philadelphia

Philadelphia and the "Royal"

Exact weighing of value—judgment on performance, not promise—those are characteristics of Philadelphia business houses.

Holding to that sound basis of performance, the Land Title & Trust Company naturally standardized on "Royal" Typewriters for their organization.

For "Royal" flexibility of production achieves the work of extra attachments without adding them—means that billing, tabulating, card typing, form or tag work is done as easily as correspondence.

And "Royal" speed of operation—inevitable because a springy straight line key action is joined to an adjustable touch—means increased production for every typist.

Compare the work—yourself—your verdict will be the same.

ROYAL TYPEWRITER COMPANY, INC.

Royal Typewriter Building, 364-366 Broadway, N. Y.
Branches and Agencies the World Over

Representative users of the "Royal" in Philadelphia

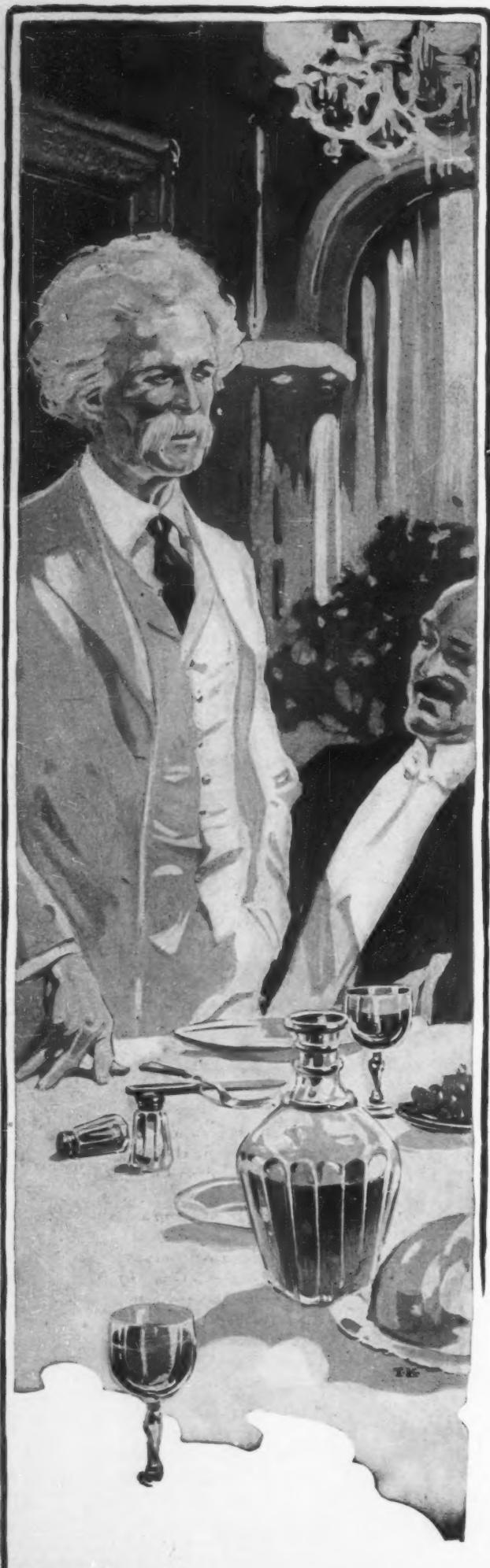
Land Title & Trust Company
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Link-Belt Company
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Edgar T. Ward's Sons Co.
Laird, Schober & Company
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Ab. Kirschbaum Company
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Atlantic Refining Company
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Pennsylvania Sugar Refining Co.
Strawbridge & Clothier

*The Royal Office in Philadelphia
is located at 1211 Chestnut Street*

"Compare the Work"

ROYAL

To Be Filed



The Memory System of Business

"Here it is!" says the Filing System, if it be a good filing system. A filing system is not just a receptacle for papers, but a method of finding them.

THE Story goes that whenever Mark Twain was booked for an after-dinner speech he used to remember the various points he wanted to make by peculiar, often grotesque arrangements of knives, forks, spoons, salt cellars, napkins, and whatever else chanced to be handy.

It was a memory system. It was also a filing system. That is, it enabled Mark Twain to put certain facts where he could get them back when he wanted them, dismissing them from his mind in the meantime.



That is what a filing system is. That is why the filing system of a modern business office is a memory system. It uses the alphabet and numerals instead of knives and forks; but essentially it does the same thing—it fishes up the next thing wanted and says: "Here it is."

It draws the pertinent fact into view as a strong magnet snaps a bit of iron from a rubbish heap. It is an instrument designed for that purpose. It enables a man, by remembering one thing, to remember a thousand. Which is just another way of saying that a filing system is not a *receptacle* for stowing papers but a *method* of finding them. It is an instrument which routes thousands of facts into oblivion and then routes them back again.



One certain paper is wanted. You hid it months or years ago in that handsome cabinet whose drawers roll silently to and fro at a touch. The paper is wanted—quickly; and lo! it spring into sight and mind as if the person operating the file had pressed a button for light.

He has indeed done the equivalent of that. The instant he wants that paper it stands out in his mind—he pictures it in a given drawer, in a given part of that drawer. Name

For Reference

him the most obscure, most utterly forgotten paper he has, and he could put his hand within a few inches of it in the dark. It is as if he kept the thousands of papers stored in those cabinets each in its own special glass case, each with its special signal shift, like the thousand wires of a telephone switchboard.

A filing system then, is a method of remembering which uses the filing cabinet as a mechanical help. The cabinet is not the system. It is part of it.

This distinction is vital. The man who clearly understands it is going to be particular where he buys his cabinets.

He will look, where he buys, for two things:

First, a simple, workable, speedy, accurate system, designed to give him a complete memory for the million details of his business by making every item of it as accessible as every other item.



Second, perfectly made cabinets to fit that system and carry it out.

He can't design his own system any more than he can make his own cabinets to fit it. For the system plus the cabinet he will go to experts who sell that combination.

He will go to the firm whose first thought is to install the exact thing needed, and who never willingly sell a cabinet till they have diagnosed the needs of the buyer.

"The pioneer filing cabinet firm" maintains a staff of skilled office engineers for this work; and the service is given free.

These men are past masters of every known filing method. If nothing already manufactured seems to fit, they design what will. They are instructed to dissuade customers from extravagant and purposeless buying of cabinet equipment, and treat every customer as if he were employing them to give him expert advice.

Along with that, of course, must go a line of cabinets that shall be the last word in beauty, utility and durability—cabinets, that will be as good after a century of use as now.

President.

Yawman & Erbe Manufacturing Company
ROCHESTER, N. Y.

Steel Filing Cabinets
Wood Filing Cabinets
Vertical Filing Systems
Card Record Systems

Shannon Filing Systems
Record Safes
"Safe Files" for Blueprints
Machine Accounting Equipment

Efficiency Desks
Transfer Cases
Folders, Guides
Metal Index Tabs



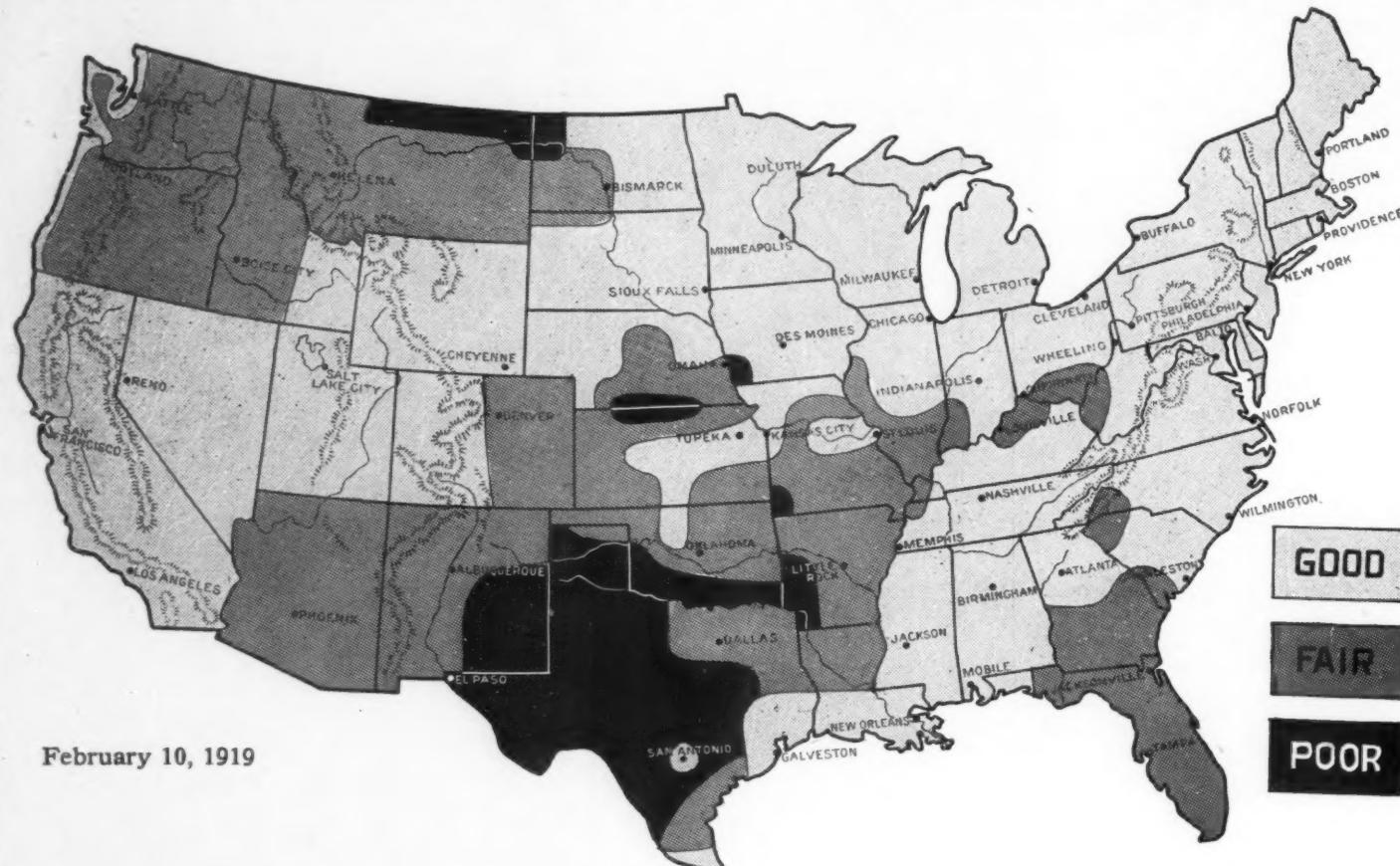
Prices Are Slowly but Surely Declining—Buying Is Lessened, though Common Sense Is Steadying Business—Unemployment Is Serious

By ARCHER WALL DOUGLAS

TO those who retain some modicum of common sense, possess some knowledge of history and analogy, and are in touch, first hand, with actual material conditions and the trend of thought among the people, there can be but one solution of the present situation, and that is a generally lower level of prices of all commodities until buying among the many can be ventured upon without the fear of such losses as are always incurred upon a declining market.

This is exactly what is happening, despite much unknowing and unending babble about the necessity of the con-

come more general and will result in an appreciably lower level of prices than prevailed during the war. The optimistic thought, or rather wish, among the few rather than among the many, that the period of declining prices is only a brief interlude in our economic history, is likely to receive a severe jolt in the coming months. The further hope that another period of advancing prices will succeed this passing episode of declines is apt also to be doomed to disappoint. That is not the manner in which such readjustments as we are experiencing have worked themselves out in the past, nor is it nature's way. Seasons of high prices and



tinuance of high prices by those whose minds are still befogged with the notion that the amount of money in circulation is the dominating influence upon prices.

Naturally, the amount of money in actual circulation—not simply in existence—will automatically adjust itself to the reduced demands of business, by seeking investment rather than productive enterprises, by not being in actual use, and by not circulating so rapidly. Federal Reserve bank notes will also naturally be redeemed and withdrawn from circulation, thus taking care of the bogey of inflation.

There have been declines in metals, notably some of the crude forms of iron and steel and in copper and lead. There have been likewise declines in the most staple cotton fabrics and in some drugs and chemicals.

These declines are becoming more general, are affecting a larger number of lines, and are fast reaching the finished materials. It is perfectly obvious, to all save the wilfully blind, that these declines will not only continue but will be-

prosperity are usually sharp, steep declivities, while periods of succeeding eras of declining prices are long, gentle slopes.

The common expectation of still further declines continues to operate in the way of the prevalence of that hand-to-mouth buying which has characterized the situation since the coming of peace. Yet, on the other hand, there is no general apprehension nor the slightest evidence of panic. The common sense of the many is still the guiding spirit of the situation. The most significant sign of all is that the volume of business, though somewhat lessened, still continues in larger measure than might be expected under prevailing conditions.

The most serious feature is the growth of unemployment, which, while not so alarming as often stated, is none the less a matter of general concern. It is largely so because work is difficult to find for all the returning soldiers,

(Continued on page 73)

HOW ONE MAN HAS Solved the Labor Problem FOR 40 CORPORATIONS

One man has *done away with strikes in 40 corporations*—has completely done away with all “Labor Troubles” in those corporations.

By the operation of a single big idea he has done away entirely with the ill-will and antagonism of labor. He has gotten from 30% to 300% *MORE WORK from the workers*. He has increased production, lowered costs, cut out gigantic wastes, paid *BIGGER WAGES* to Labor and *BIGGER PROFITS* to Capital. He has done the impossible. He has not only *revolutionized labor conditions* but he has also *given Capital a new chance*.

His name is John Leitch. And he has done all this merely by putting in operation in these 40 corporations a unique plan which he originated some ten years ago—a plan which he has named “*INDUSTRIAL DEMOCRACY*.”

In not one of all these 40 industrial plants has there been a strike since Leitch’s plan was introduced and carried out. In not a single plant has there been labor dictation, labor antagonism or dissatisfaction. And every one of these plans has *INCREASED PRODUCTION, LOWERED COSTS, PAID BIGGER WAGES AND MADE BIGGER PROFITS*.

John Leitch’s plan is somewhat startling—some might even call it revolutionary—but the all important thing about it *is that it WORKS*. It gets *RESULTS*—results that are oftentimes astounding.

This unique plan ought to be in operation in every industrial plant, in every mine and mill and factory in America. The most important thing before every Employer



JOHN LEITCH

today—the most important thing to all America—is the *settling of the Labor Problem and the settling of it RIGHT*. And John Leitch’s plan is now available to *every Employer*. His whole scheme of *INDUSTRIAL DEMOCRACY*—exactly as operated in 40 industrial corporations—is now open to every Employer who wants to investigate its workings.

In a simple, easily read book of less than 300 pages, he has given not only the full details of his plan, but also the *ACTUAL RESULTS IT HAS ACCOMPLISHED FOR Capital and for Labor in the 40 industrial concerns where it has been carried out*. And this book is now ready under the title of

MAN TO MAN The Story of Industrial Democracy

In this book John Leitch doesn’t give you fanciful theories or the dreams of an impractical idealist. He simply gives you the *PROVED METHODS* which 40 corporations have successfully put into practice.

He gives you specific instances of remarkable accomplishment in plants that are known throughout America—and with the full approval and endorsement of their owners, gives you the *NAMES OF THE CORPORATIONS* and the cities in which they are located.

He gives you the plain record of what *INDUSTRIAL DEMOCRACY* has accomplished with hardfisted workers and hard-headed employers, in factories and foundries, with both male and female labor, with skilled and unskilled workers, with the illiterate and the intelligent, with those who

couldn’t speak English and those who could. He tells what has been accomplished in plants making almost every kind of product—in plants making steel, pianos, automobile parts, paints, women’s wear, men’s clothing, boys’ waists, paper bags, furniture, tobacco pipes, textiles of various sorts, and in machine shops.

We believe it to be the most remarkable book, bearing on the relations of Labor and Capital, that has ever been published, in this or any other country. We believe it will change the whole relation between Employer and Employed.

Some Things that John Leitch Tells in “MAN TO MAN”

He tells you how in the small power plant of a manufacturing concern in Indiana the workers themselves, as a result of his method, reduced the annual cost of coal, water, oil and labor from \$12,350 to \$7,693—a clear saving of \$4,657—and *gives you the name of the plant and shows you how they did it*.

He tells you of a group of piece workers getting a piece work rate of 42 cents, who *themselves* devised new and ingenious jigs, cut out lost motion—and *THEN THESE WORKERS SUGGESTED THAT THEIR PIECE WORK RATE BE CUT FROM 42 CENTS TO 11 CENTS*. And they made more money at the low rate than they did before.

He gives you the name of a small factory that is now turning out *MORE GOODS and BETTER GOODS* than ever before in the company’s history—and *DOING IT WITH ONLY 168 MEN*. Both workers and factory are making big profits.

He shows how under his plan the slackers and wasters and professional agitators who block production and cripple profits are automatically thrown out without any worry on the part of the management. He points out that workers now all over America have acquired new tastes, new ambitions, new desires that *MUST BE SATISFIED*.

He shows why the present antagonism between Capital and Labor *MUST BE REMOVED*.

He emphasizes the fact that human hearts are just the same behind a worker’s shirt or behind a booted white front; that the day laborer has human joys and sorrows, ambitions and aspirations, just the same as the millionaire.

A Small Edition—for Employers Only

We have printed only a small edition. It is not for general distribution. We have printed only a sufficient quantity to fill the needs of those executives and employers who are vitally interested in *SETTLING THE LABOR PROBLEM* once and for all and *settling it RIGHT*. We will fill all orders in the order in which they are received, while this edition lasts.

John Leitch’s book is not a popular novel. It is not a book to be skimmed through in an hour. On the contrary, one of the best informed men in American industry says: “This book is one of the greatest contributions to American business that has ever been penned. It offers the only practical solution to intolerable labor conditions. Its methods and principles are the methods and principles that *MUST BE PUT INTO PRACTICE*, without exception, to avert a state of anarchy and riot and wild-eyed BOLSHEVISM—that must be put into practice if Capital is to have a fair chance, and if the people of America are to be happy, contented and prosperous.”

You Need Send No Money

unless you prefer to, for your own convenience. We don’t want anyone to pay for a copy of “*MAN TO MAN*” unless he appreciates its value. If he does not, we would much rather he would send it back for the use of someone else. Therefore you need send no money—merely mail the coupon and we will send the book, all charges paid. If you find it worth many times its price, send us your check for \$2.00—if not, *SEND BACK THE BOOK*.

We Reserve the Right to Refuse all Orders after this First Small Edition is Exhausted.

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Publishers of *Forbes Magazine*

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Please send me, postage paid, a copy of “*MAN TO MAN*” by John Leitch. I will either return the book to you or send you \$2.00, within five days after I receive the book.

Name _____

Street Address _____

City _____

State _____ Nat. Bus. Mch.

Little Stories of the Nation's Business

High lights in the swiftly moving drama of American Business finding itself after the shock of peace

American business men in large numbers are now in Europe or are on their way in search of trade opportunities. Heads of many important industrial and distributing concerns are getting on the ground with a view to re-establishing foreign connections. Before the war concerns dealing with Europe had their own offices abroad or were linked with foreign houses, but these connections in many instances were broken.

SURPLUS STOCKS held by the Government will be disposed of in close cooperation with the trades. Joseph H. Defrees, Chairman of the War Service Executive Committee of American Industries, has concluded an arrangement with the Director of Sales of the War Department under which units of industry will be given first chance at their own goods. The manufacturer who has sold the materials to the Government will be given the first opportunity to purchase them back. If he does not want them, the goods then will be offered to other members of the trade and finally to the general public if the trade does not care to take them off the Government's hands.

The Director of Sales is completing inventories quite rapidly and as fast as information is available it is sent out to members of War Service Committees.

BINDER TWINE used in the United States has come almost exclusively from Yucatan. The Department of Agriculture believes there are possibilities, however, that the United States will become independent of foreign growers. Work carried on by the Department in cooperation with the Philippine Bureau of Agriculture has resulted in the introduction into the Philippines of the first really efficient machines for cleaning Manila sisal. Sisal will be planted, according to the Department of Agriculture in increasingly larger areas in the islands and within a few years, officials say, the Philippines will produce enough to supply all the needs of the States.

HESITATION is evident among the buyers in almost every industry. Most people believe that prices are bound to come down and are holding off awaiting the drop. Whether prices will fall or not this attitude, in the opinion of many experts, inevitably would lead to a price drop since the lessened demand, whatever its cause, would of itself bring prices down.

The opinion is held by some that when prices drop and the buying public begins to stock up on goods prices will show a rise for a time before there is a general decline.

THE editor of this page remains constantly at the center of the cross currents of new business thought in Washington. He is a "snapper up of those unconsidered trifles" which in such breathlessly critical days may contain the fate of a national industry. His little sermons are texts minus the preaching. He leaves you to do the philosophizing, to suggest the necessary remedy or—if the case demands it—to offer the concluding prayer.

Since nobody knows how much lower prices will go or what is the proper level of prices under the new conditions, it is not strange that business should hesitate. One influence that is considered likely to keep prices up for a time is the inflated state of money and credit; another is the high price of labor.

American exporters are somewhat concerned at the recent tendency of South American buyers to cancel orders. They attribute the situation to the fact that there has been a great deal of talk of falling prices.

FOREIGN TRADE GAINS in recent months have been largely through Pacific Coast ports. A compilation by the National City Bank shows that exports to the Far East have increased about five times as rapidly as have those through Atlantic Coast ports. Imports through cities on the West Coast show an advance of 30 per cent. while those on the Atlantic Coast decreased.

PETROLEUM PRODUCTS in the United States broke all records in 1918. The total amount of crude petroleum marketed from oil wells and field storages reached the total of 345,500,000 barrels, a gain of three per cent. over the former high record established in 1917.

The most pronounced response to the wartime demand for petroleum was in Texas, Louisiana and the Rocky Mountains and California fields, but there was a considerable gain also in the old Appalachian fields.

SAVINGS amounting to more than \$50,000,000 were effected by the substitution of baling for casing or boxing in the shipping of clothing and equipment to the American Expeditionary Force. The savings included material, labor in packing, handling tare weight, and cargo space.

The Packing Service Branch of the Quartermaster's Department besides devising baling methods worked out many improved methods of packing.

In the shipping of a million standard bales of goods the conservation of cargo space amounted to 8,000,000 cubic feet. Expressed in ship tons this represents a capacity of 41 standard cargo ships. It is estimated that 58,000,000 feet of lumber was saved by baling. The lumber was replaced by burlap which is easier to reclaim than is lumber.

WOOLEN GOODS made in Austria-Hungary in the last year are said to be practically worthless. Tailors have refused to make the material into clothing because the results were

not worth the labor. The only clothing materials of any value are pre-war stocks and these command fabulous prices. Goods from which men's suits are made averages \$80 a yard.

American potters are looking for a greatly expanded trade this year. Retailers cleared up a large part of their stocks at Christmas time and buyers seem to be holding back not at all on account of high prices. Manufacturers say the country is almost bare of crockery. Production has been at low ebb during the war and for the last four years virtually all imports from Europe have been cut off. Germany used to ship us \$9,000,000 worth of chinaware a year, and shipments from France were large.

Potters do not fear that importations will hurt their trade. They say it will be more than a year before there is an adequate supply of foreign goods and that the domestic producer has been running thirty-five to forty per cent. short in production.

The situation in respect to glass manufacture is said to be not quite so good. Importations of glass never have been large with respect to the volume of goods manufactured here.

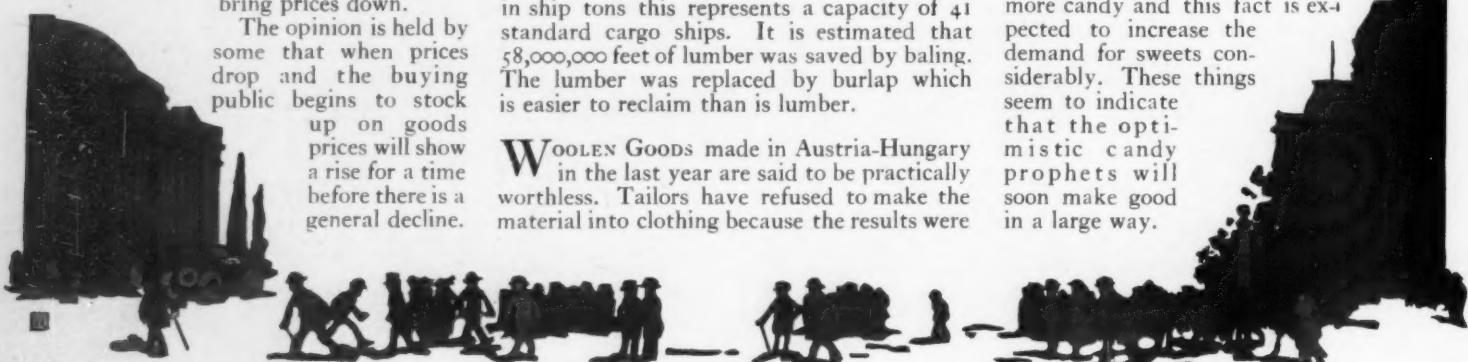
COTTON Goods can be woven to be as warm as woolen fabrics, according to the Bureau of Standards. Experiments conducted by the Bureau show that the heat conductivity of the different fibres in themselves was virtually the same and that the heat retaining properties of the fabrics are a function of fibre arrangement.

"It is a demonstrated fact," says the Bureau, "that a cotton blanket may be designed which will be as warm as a woolen blanket."

The addition of cotton does not affect the desirable properties of woolen fabrics in many cases and some shoddies are of advantage.

CANDY MANUFACTURERS believe the year 1919 will see the greatest trade in their products the country has ever known. Stocks are low, as the Government maintained rigid restrictions on candy manufacture all of last year. Imports are not expected to increase very much in volume because of the shortage of supplies abroad. Prices, manufacturers believe, will remain high.

One factor that cannot be overlooked is that of prohibition. Statistics show that people deprived of alcoholic beverages consume more candy and this fact is expected to increase the demand for sweets considerably. These things seem to indicate that the optimistic candy prophets will soon make good in a large way.



Setting the Clock Ahead an Hour Saves Daylight But It Does Not Save Time

"The Moving Finger writes, and having writ,
Moves on: * * * * ". —Omar Khayyam

Setting the clock ahead *does not save time*. The hours and the minutes are ticked off just as remorselessly—just as finally—for *you* as well as for *all of your organization*! The only way to outwit Father Time and to make him pay full dividends is for *every one* to get full sixty seconds value out of every minute of the business day.

This doesn't mean *grinding*.

It *does* mean keeping your finger on the pulse of your entire organization—every man and every department at his own desk—yet *keeping yourself free*: free from interruption—free to think—free to invite "vision" without which no business can grow.

THE DICTOGRAPH SYSTEM Of Interior Telephones

—while giving complete, immediate and automatic intercommunication throughout the organization, at the same time through the famous loud speaking Master Station places the executive in direct contact with every division and section of his business.

We want to send *free* to every interested executive with an intercommunication problem, whether bank, office, store, factory, plant or Governmental department—

"An Essay on Executive Efficiency"
Just ask for it—It's yours

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in all
Principal Cities



Note—The Essay on Executive Efficiency analyses the problem of intercommunication, and its relation to successful and economical conduct of modern business. It shows the way out from inefficiency and complicated routine and also very interestingly sets forth a most timely subject of interest to every progressive executive.

Those British Embargoes

Being the tale of what happened to the innocent bystanders as a result of England's struggle for stability, with a forecast of the possible solution

EQUILIBRIUM is evasive, and not to be won without a struggle. Besides, it may mean different things in different circumstances. It is this uncertainty about what constitutes equilibrium that caused no little stir at the end of January, when England set about doing some "equilibrating" through the medium of import embargoes.

Equilibrium in its latest sense may have been invented by France, in the latter part of November. France then announced a policy of developing national industries to the point of equilibrium with respect to materials and labor.

As any seeker after equilibrium can testify, any one who strives for this desirable state may go through most unexpected motions before he achieves the point of stability. Perhaps there is an analogy for a nation. In that event, some slight annoyances over French policy as to imports were merely the discomforts sympathizing friends are destined to suffer from the involuntary gyrations of a nation going through the first difficult stages that lead toward an equilibrium. Any other view is risky; for there is none too much news of a dependable sort and it is exceedingly easy to become the dupe of enemy propagandists who delight in awakening irritation among the peoples that confront them.

Possibly, in thinking of national industries—meaning those of national importance—France had borrowed a leaf from England's book. At any rate, England had decided upon a special policy for development of key industries, and last October had a key-industries exhibition in London. By way of fair exchange, England may have adopted the French principle of equilibrium.

Essential and Difficult

HOWEVER this may be, a purpose of restoring equilibrium was ascribed to England by our own War Trade Board when, on January 29, it announced England's intention to restrict imports of a long list of articles after March 1, with other restrictions to follow on July 1. The list for restriction after March 1 showed principally manufactured articles, such as machine tools, linen yarns, and manufacturers of furs.

Equilibrium is both essential and difficult in England. Ten million persons in her population—or between one-fourth and one-fifth of the whole—went to war or engaged in war work. Shifting back to normal activities involves such a change around that the British Government has had a policy as to war contracts quite unlike our own. Cancellations of war contracts were more restrained, and after the armistice even orders were placed in some districts to stabilize industry in the trying period of readjustment.

Looking ahead to the difficulties of transition, over a year ago the War Cabinet had unsuccessfully sought legislation which would permit control of imports and exports for three years after the war. Recently, control of imports and exports was consolidated under the Board of Trade, and to assist in forming policies a consultive committee of manufacturers and merchants was appointed. Finally, when

England began on November 15 to remove restrictions on imports it announced, at least as to some articles on the list of January 29, that its action held good only until March 1.

Our officials, possibly proceeding upon the assumption that, since in the United States the industrial concentration for war was to be turned loose to save itself as best it could, the same course would be followed everywhere, may have failed to appropriate a different state of affairs abroad, and waxed a bit too optimistic. In early January, for instance, they commented upon the fact that the British removal of some restrictions was stated to last only until March 1, but added that the removal would then undoubtedly be extended. They may have erred again in failing to make plain in the announcement of January 29, that British restrictions would apply up-

to the advantage of all, reduce the international unexpectedness of their struggles to reach the point of stable equilibrium that the whole world needs.

Honorable Mention

SOMEDAY the man who did his part in the war without putting on a uniform may receive the recognition that he deserves. It is possible that he may never get it. Many of the

hundreds of thousands of men and women who performed their part at home feel keenly the fact that the value of their work has not been given the official consideration that it deserves.

One of the few classes of civilian workers who go back to peace time pursuits carrying an emblem which they can prize is the shipyard employee. The fact that the shipworkers' labor was recognized was due to the efforts of the Chamber of Commerce of the United States. It saw that these men received a badge.

Soon after the entrance of the United States into the war, the Chamber undertook to cooperate with the Government in obtaining the necessary shipping through the appointment of a War Shipping Committee. This committee organized local war shipping committees in virtually all the principal shipbuilding centers which came in close contact with the builders, learning their problems and devising means for helping in their solution. This committee originated many of the methods subsequently adopted by the Shipping Board and Emergency Fleet Corporation.

Early in its work the War Shipping Committee suggested to the Government the advisability of distributing a shipworkers' badge. Officials of the Fleet Corporation, however, took the position that the Corporation itself should not issue badges for the reason that it was felt that if it were undertaken the example might be followed by other departments of the government with the result that there would be so wide a distribution of badges that they would fail of their purpose of exciting pride and enthusiasm in the work under way.

Officials, however, approved a plan whereby the committee should distribute badges and offered to give it endorsement.

The distribution of badges has been discontinued now that the war is over. In all, 295,820 were sent to the country's shipyards for the workers.



on imports from all countries including British overseas dominions.

Various events may happen before March 1, as is demonstrated by the apparent success of the American Chamber of Commerce in London in effecting an understanding that American manufacturers of leather, such as shoes, will be admitted in quantities corresponding to imports of American leather. In fact, a very important event may already have taken place, for the cables announced that at Paris it has been agreed to have a supreme economic council that will supersede all the different bodies which have been dealing with international distribution of supplies and food.

It is within the range of possibility that such a council might have a coordinating influence upon the nations that must now strive for balance and poise in their domestic situations, and

After every war come the great successes—*and great failures*

IS your future worth half an hour's serious thought? If it is, then take down a history of the United States. You will discover this unmistakable truth.

Opportunity does not flow in a steady stream, like a river—it comes and goes in great tides.

There was a high tide after the Civil War; then came the panic of 1873. There was a high tide after the Spanish-American War; then came the panic of 1907.

There is a high tide now; and those who seize it need not fear what may happen when the tide recedes. The wisest men in this country are putting themselves now beyond the reach of fear—into the executive positions that are indispensable.

Weak men go down in critical years—strong men grow stronger

If you are in your twenties, or thirties, or your early forties, there will probably never be another such critical year for you as this year, 1919.

Looking back on it, ten years hence, you will say: "That was the turning point."

Thousands of the wise, thoughtful men of this country have anticipated the coming of this period and prepared for it.

They have trained themselves for the positions which business cannot do without, thru the Alexander Hamilton Institute Modern Business Course and Service.

The Institute is the American institution which has proved its power to lift men into the higher executive positions.

These men have already decided to go forward

Among the 75,000 men enrolled for the Institute's Course and Service, 13,534 are presidents of corporations; 2,826 are

vice-presidents; 5,372 are secretaries; 2,652 treasurers; 11,260 managers; 2,626 sales-managers; 2,876 accountants.

Men like these, have proved the Institute's power: E. R. Behrend, President of the Hammermill Paper Co.; William D'Arcy, President of the Associated Advertising Clubs of the world; Melville W. Mix, President of the Dodge Manufacturing Co., and scores of others.

Men like these, who have trained themselves to seize opportunity, will make these after-war years count tremendously.

You, too, can make them count.

Advisory Council

Business and educational authority of the highest standing is represented in the Advisory council of the Alexander Hamilton Institute.

This Advisory Council includes Frank A. Vanderlip, President of the National City Bank of New York; General Coleman du Pont, the well-known business executive; John Hays Hammond, the eminent engineer; Jeremiah W. Jenks, the statistician and economist; and Joseph French Johnson,

Dean of the New York University School of Commerce.

Send for this book. There is a vision in it of your future

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Business Position

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TO equip and keep an army of four million in clothes was the task set for the textile industry. No notice to get ready was given; no time to prepare—just orders to do it, and do it quickly.

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Only those close to the men responsible for production know how the textile mills passed through these two crises. Wires hummed with "help us all you can" and the quick answer came, "count on us to the limit."

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of the hour," and it is a matter of record that electric power solved many a knotty production problem.

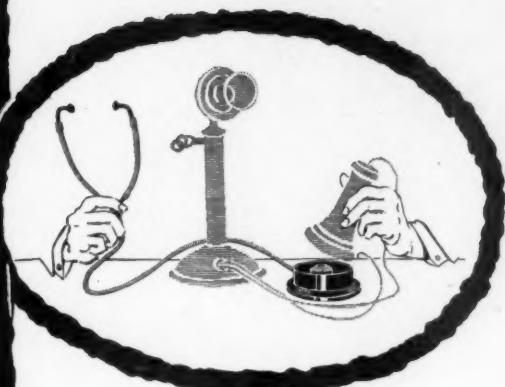
In the cotton, woolen, and worsted mills throughout the country, 75% of the electric power used passes through G-E Motors. The largest mill building in the world (The Wood Worsted Mill of the American Woolen Company, at Lawrence, Mass.) is equipped with General Electric Motors supplying 15,000 horsepower. G-E Motors also predominate in the great workshops of America's clothing manufacturers.

These accomplishments in the textile field are an example of how the General Electric Company serves American industry. Its great manufacturing plants, its corps of engineers, its power specialists—never further away than a few hours' ride—are at the service of every manufacturer.

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That brings me to the second point. A healthy public sentiment for trade will affect our national legislation in favor of industry both at home and abroad. We can hardly say that our Legislatures, anywhere, have been sympathetic to industry. It would be a fair statement, I think, that they have been hostile.

An Invitation from Austria

IS this condition of governmental hostility to home industries encountered in Europe? Not at all. When we began to refine oil in Austria we were invited to join the cartel—that is, the "trust"—on the assertion our joining was needful protection to the Austrian petroleum industry. We declined. There were good reasons why we did not care to join. It was against the laws of our own country.

After a time we were informed indirectly by the Austrian Government that it would be advisable for us to join the trust. Still we declined.

Pretty soon we began to see why it was advisable. The first thing we knew the commodity tariff on crude oil from the wells over the State railways to the refineries—which was less than the rate on the finished product—was withdrawn from us and we were compelled to pay the full rate. Our competitors enjoyed the commodity rate.

Still we declined. The next step was to disconnect our loading racks in the oil regions. We were still able, however, through assistance and some crowns paid to competitors, to load our cars. We still declined. Then the switch running into our refinery—mind you, this was a State railway—was disconnected so that no tank cars could get into our refinery. Still we held out.

Just Like Home!

WE received our tank cars of crude oil at the common freight yard and sent our tank wagons over to pump it out. Then suddenly the municipality discovered this method was dangerous and said we could no longer continue it. Now we were completely bottled up. In the meantime we had appealed to our own Government. We asked them about this situation. They said: "It is very bad, that is true."

Some modest steps were taken. The American Ambassador went to the Minister of Commerce at Vienna and had a talk with him. The Austrian Minister said: "I am perfectly astonished that you are coming to me to talk about our action toward the American oil industry because we are treating it in identically the same manner as your own Government is treating it at home."

When we found out nothing was to be accomplished by our refusal and our own Government could not help us, we capitulated and joined the cartel. I want to tell you, gentlemen, it was not a bad thing after all. In fact, we found it rather a good thing. There were some restrictions and some difficulties. We were limited in quantity and price in various districts, but on the whole it stabilized the trade.

Later on when we began refining in Germany we were wise. We asked admittance to existing cartels at the start. It so happened that at the time we were ready to sell gas oil the refining interests were holding a cartel meeting in Berlin. They were apportioning gas oil and axle oil for the State railways, which were the only buyers in Germany for this class of oil. The newspapers openly came out and said: "There is a new element appearing in this class of trade, the Vacuum Oil Company."

We asked for 12,000 tons and vigorously stood out for it. We got 7,000—which, after all, was our reasonable share. Then, all to-

gether, we agreed on prices and went to the Government authorities and said: "Gentlemen, how about these prices?" They figured them over and said: "We want you to make a fair and decent profit. Go ahead; the prices are entirely satisfactory. Allot the quantities as you please."

Now, what is the attitude in England? Do they look after their industrial interests? They take their representatives of industry and make lords of them. They put them into the House of Lords to take care of business, to see

that industry shall not suffer, and that their foreign trade shall be taken care of. I have jotted down a few names: The late Lord Rhonda, for instance, noted in mining enterprises; Lord Cowdray and Sir Samuel Marcus in the petroleum industry; the late Lord Kelvin, scientist, with whom our own Mr. Edison may be compared, and Lord Masham and Lord Savile in the textile industries. This list might be enlarged, but it is sufficiently illustrative. These men and others less noted help to make the laws governing England's wide industrial ramifications at home and abroad.

The Outcast

SUPPOSE we were to recommend, that the president of one of our oil companies and the president of one of our steel companies, and the president of some other great industrial organization should be taken, one of them, into the President's Cabinet, and the others into the Senate of the United States, simply to care for the industries of the United States. What a cry would go up all over the country. Yet this is what our foreign competitors are doing. This is what we are face to face with.

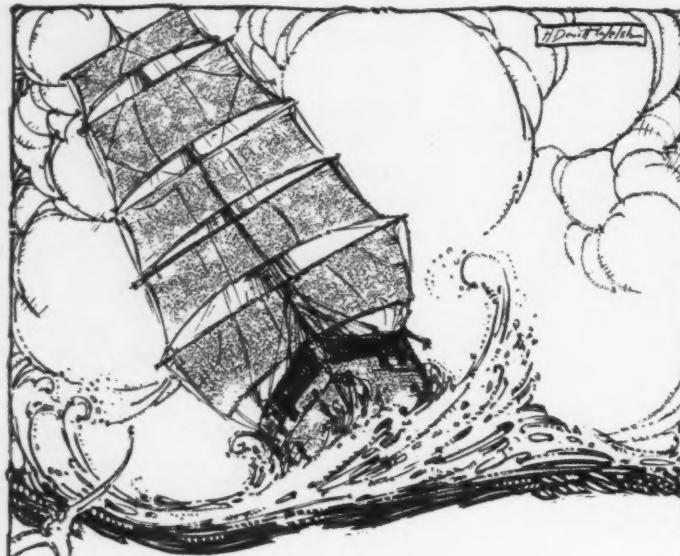
Competing countries are watching and guarding their interests in the halls of legislation. The Board of Trade and other commercial bodies in the United Kingdom have legislative power; they are able to govern in the questions of trade—they control trade. We are all more or less asleep.

This brings another thought. No nation has ever been great that has not had ships. All things being equal, the nation with ships will get the foreign business. What was the attitude of this country with reference to shipping before the war? The feeble efforts made from time to time to get some legislation that was favorable to shipping simply seemed to send a shudder throughout the United States. "What do we want foreign trade for, anyway?" seemed to be the prevailing sentiment.

Senator LaFollette, that marvelous salt water mariner of the prairies, got laws through Congress that were rapidly driving the last American flag off the last American ship on the high seas.

What did Germany do when it started out to get foreign trade? The government went to traders and merchants and said: "We want a merchant marine; go get ships; buy them in the cheapest market, get them into service under our flag, and do not pay any attention

(Continued on page 68)



THE CHALLENGE OF THE SEA

By PERRIN HOLMES LOWREY

The wild, fierce freedom of the stubborn seas
Beats in our blood. The sunlit morning comes,
And down the dawn we hear great destinies
Calling our courage, like rich, distant drums.

The streaming lanes of commerce surge and sway
Daring our boats to breast them and explore.
Put forth the trading vessels! Seize the day!
Ho! race the engines. Seek the farthest shore!

Put forth to China, Africa and Greece.
Up! weigh for Argentina and the Horn.
Set all your ships to seek the Golden Fleece,
And let their crews go singing down the morn.

With steel and books and chemicals and ore
Let the ships sail. The ocean roads are free.
Put forth to Rio and to Singapore,
And all the ports that fringe the swinging sea!

In this new age of manly sentiments
In seeking ends beyond a selfish good,
They serve the most who waken continents
And teach the world a braver brotherhood.

gether, we agreed on prices and went to the Government authorities and said: "Gentlemen, how about these prices?" They figured them over and said: "We want you to make a fair and decent profit. Go ahead; the prices are entirely satisfactory. Allot the quantities as you please."

How It All Worked Out

SO we divided up the government business and went on very comfortably and none of us made any extravagant profit.

Suppose prior to the war, we of the oil industry had gotten together and said: "The United States Government intends to buy so much oil



*"A living thing
Produced too slowly ever to decay."* — *Wordsworth*

NATURE must have had the American builder in mind when she produced the Sequoia—the giant Redwood of California.

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Endurance is aged into California Redwood. Decay-resistant to a remarkable degree, it is particularly suited to out-door construction in contact with the ground or exposed to extremes of temperature.

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braces, for fire-door cores, for tanks and vats, for paving blocks and for other similar uses where a decay-proof, rot-resisting building material is essential.

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Let us tell you more of this remarkable wood! Write for our free booklets: "California Redwood Homes," "How to Finish Redwood," "California Redwood for the Engineer," "California Redwood Block Paving" and "Specialty Uses of Redwood." Please mention the name of your architect and lumber dealer.

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California Redwood
Resists rot and fire



A SALESMAN'S ability is shown, other things being equal, by the cost of his own selling. This cost may be said to decrease in direct ratio to his acquisition of selling knowledge, of knowledge of the measures and tactics that compel sales.

A few books on salesmanship in general were listed last month, with "Books for the Salesman and the Sales Department." This list gives some of the best books on salesmanship principles and on selling several special lines of merchandise, and notes certain sources of sales information. This list, like some of the previous ones, is far more notable—not more valuable, but notable—for what it omits than for what it includes! It omits a vast flood of "Literature of Business," a flood which began to rise scarcely more than a decade ago, and is now only just beginning to get in motion. The value of lists like this one lies here—that they inevitably make it plain to at least a few of the workers in the business field, that every good idea, old or new, is going into print, and that if they hope to win out as business workers, they must keep everlastingly at the reading of business literature.

Principles of Salesmanship

Addresses are omitted of those publishers which are well known to all good booksellers.

Brief descriptive notes are added to titles only where the title itself does not quite definitely suggest the contents.

Barrett, H. G. *How To Sell More Goods*. Secrets of successful salesmanship. 1918. Harper. \$1.50. Many suggestions and ideas conveyed by anecdotes.

Brisco, N. A. *Fundamentals of Salesmanship*. 1916. Appleton. \$1.60.

Fisk, J. W. *Salesmanship*. 1914. Merchant's Pub. Co., N. Y. \$1.50.

Fowler, N. C. *Practical Salesmanship*, a treatise on the art of selling goods. 1914. Pitman & Sons, London. 5s.

Hoover, S. R. *Science and Art of Salesmanship*. 1916. Macmillan. \$0.75.

International Correspondence Schools. *Salesman's Hand Book*. 1913. Internat. Cor. Schools, Scranton, Pa. \$0.50. A reference book of selling information.

Knack of Selling. 6v. 1913. Shaw, Chicago. \$3.

Leichter, E. *Successful Selling*. 1916. Funk. \$50. Chapters on the approach, presentation and closing of sales.

Maxwell, W. M. *Salesmanship*. 1914. Houghton \$1. Essays on salesmanship.

Moody, W. D. *Men Who Sell Things*. 1912. McClurg. \$1. Observations and experiences of over twenty years as a traveling salesman, European buyer, sales manager, employer.

Roche, R. A. *Salesmanship for Women*. 1914. Ronald, N. Y. \$1.

Shively, N. O. *U Book, Selling One's Self*. 1917. Shively Service Bureau, 2205 State St., Chicago.

Whitehead, Harold. *Principles of Salesmanship*. 1917. Ronald, N. Y. \$2.50. The most recent and thorough presentation of the subject.

Scott, W. D. *Influencing Men in Business; the psychology of argument and suggestion*. 1916. Ronald, N. Y. \$1.

Books for the Salesman

By JOHN COTTON DANA

Librarian, Free Public Library, Newark, New Jersey

SPESIAL news bulletins for salesmen, issued weekly as part of the Dartnell Sales Service, by the Dartnell Corporation, Transportation Bldg., Chicago, give good suggestions and are used by many salesmen to provide them with new selling ideas. A salesman's self-analysis chart is supplied. Complete service, \$4 a month, includes two copies of the Bulletin.

Sources of Information

THE Business Data Bureau Service, Kahn Bldg., Indianapolis, supplies a card index to business magazines, pamphlets and new books, \$30 a year, cards sent monthly. It indexes many good things on salesmanship. Your firm or your public library may subscribe for this service. Any of the articles indexed can be bought of the Bureau. This service may well be worth what it costs.

Many large firms issue manuals for their salesmen. Many of the suggestions and the rules for salesmen which they contain will be found of value in developing the methods of any salesman. The same is true of many of the house organs issued by sales departments or large firms. If not received by your own house you can get almost any of them by direct appeal or through your public library. A list of salesmen's house organs appeared in a recent special report of the Dartnell Corporation, Transportation Building, Chicago, called "Bulletins, house organs and special plans for building *esprit de corps*." The price of this report is one dollar.

Selling Particular Lines

OUR page would not contain a complete list of books and parts of books on selling particular lines. Good articles appear constantly in magazines and trade papers. At your public library such articles as you are specially interested in can be found, in a few minutes, through the Industrial Arts Index, Public Affairs Information Service, Business Digest, The Reader's Guide.

ADVERTISING

Calkins, E. E. *Sellers of Space; sellers of advertising*. In his *Business of Advertising*, p. 19-92. 1915. Appleton. \$2.

Chasnof, J. E. *Selling Newspaper Space*. 1913. Ronald, N. Y. \$1.40.

Johnson, A. P. *Selling Advertising and Advertised Goods*. In his *Library of Advertising*, v. 6. Cree Publishing Co., 503 Harvester Bldg., Chicago, 1911. Sold only in sets, \$30.

AUCTIONEERING

Johnson, Charles. *Guide to Successful Auctioneering or How to Become an Auctioneer*. 1903. J.

F. Drake & Co., 1006 S. Michigan Blvd., Chicago. \$50.

AUTOMOBILES

Newmark, J. H. *Automobile Salesmanship*. 1915. Automobile Pub. Co., 612 Chamber of Commerce Bldg., Detroit, Mich. \$1.50.

Newmark, J. H. *Salesmanship and the Prospect*. In his *Automobile Business*, p. 46-70. 1915. Automobile Pub. Co., Detroit, Mich. \$2.

BANK SALESMANSHIP

Colden, C. J. *Teaching People to Use the Bank*. In *Library of Business Practice*, v. 5, p. 22-31. 1914. Shaw, Chicago. \$1.35.

Lewis, E. S. *Department of New Business*. In his *Financial Advertising*, p. 630-561. 1908. Levey Bros. & Co., State House Sq., Indianapolis. \$5.

BOOKS

Fowler, N. C. *Selling a Book; Book Agent*. In his *How to Sell*, p. 123-133, p. 289-303. 1915. McClurg. \$1.

COMMERCIAL TRAVELERS

Moody, W. D. *Men Who Sell Things*. 1911. McClurg. \$1.

Quinn, F. W. *How To Be a Good Salesman*. 1909. Harper-Adams & Co., Omaha, Neb. \$50.

COOPERATIVE SELLING

Zimmerman, W. S. *When Dealers Cooperate for Trade*. In *Library of Business Practice*, v. 5, p. 55-58. 1914. Shaw. \$1.35.

EXPORT TRADE

Aughinbaugh, W. E. *Selling Latin America*; a problem in international salesmanship; what to sell and how to sell it. 1915. Small, Maynard & Co. \$2.

Mahony, P. R. *Export Salesman*. 1916. Business Training Corp., 185 Madison Ave., N. Y. Sold only in sets. Course in Foreign Trade, 12v. \$30.

FOOD

Beeching, C. L. T. *Salesmanship*. In his *Grocery Business Organization and Management*. p. 78-83. Pitman. \$5.

International Library of Technology. *Selling Food*. In *Selling as a Business Force*, section 12, p. 113-116. International Cor. Schools, Scranton, Pa. 1916. \$5.

GLASS AND HARDWARE

Lehmann, M. A. *Department Store Merchandise Manuals: Glassware Department*. 1917. Ronald, N. Y. \$1.25.

Soule, R. F. *How To Sell Hardware*. 1913. D. Williams Co., 239 W. 39th St., N. Y.

HOUSE FURNISHINGS

Hutchinson, E. L. *Housefurnishing Department*. 1918. Ronald, N. Y. \$1.25.

INSURANCE

Horner, W. M. *Training for a Life Insurance Agent*. 1917. Lippincott. \$1.25.

Miller, W. *Art of Canvassing; How to sell insurance*. 1912. Spectator Co., 135 William St., N. Y. \$1.50.

Selling Methods: *Fire Insurance*. Shaw, Chicago. \$1.50.

Selling Methods: *Life Insurance*. Shaw, Chicago. \$1.50.

(Continued on page 76)

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Plants at
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brisance	Taube
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and hundreds of others

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on questions about *words, places, people, etc.*, is constantly used by hundreds of thousands of men and women as a necessary tool in their work, as a stepping-stone to promotion and larger usefulness, as a court of last appeal. We all value insurance. Why not insure against loss caused by errors in your use of English? Never before was the **New International** so urgently needed, and never before was it procurable at a price so relatively low.

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Open Door for World Trade

(Continued from page 36)

the open these objectionable and concealed discriminations.

When we turn to the subject of possible exceptions to the open door principle our subject becomes more controversial. Cases, however exist where geographical and even political ties will justify, even from an international standpoint, preferential arrangements or a customs union. Here, as in the case of concealed discriminations, we have a problem for international investigation and possibly decision.

Machinery of An International League

BOTH concealed discriminations and open exceptions to the general rule of the open door raise immediately the question of the machinery to be adopted by nations for their joint action. We cannot here discuss the details of the League of Nations, but some phases of its possibilities should be suggested in relation to preferences and the open door.

No international league will spring into existence fullfledged. A plan too ambitious for the present time will destroy itself. Nations will not immediately yield up that degree of sovereignty which the more pretentious plans for a League of Nations call for. Years of education and experimentation are ahead of the world before the tradition, the sanction, and the international will come into being, which are necessary to make a comprehensive world state a success.

The immediate problem is to determine the steps which now should be taken toward international government, for real progress depends on knowing how much the world will accept at the present stage of its development. The following proposals are, therefore, made as suggestive guides toward permanent peace:

(a) That general principles, governing as many subjects as possible, be enumerated in general treaties signed by all the nations. For example, instead of leaving discriminations and preferences to nations bargaining two by two, or to special conferences, the nations should adopt by general treaty the principle of the open door and unconditional most-favored-nation treatment.

(b) That there be established with ample funds to support them, a series of advisory and administrative commissions, whose duty it will be to investigate and give publicity to matters of international concern and to administer any task laid on them by the final treaties.

(c) That the peace treaty provide for the reassembling from time to time of the delegates of the nations and that at these periodic meetings these representatives have power on their own initiative, or on the recommendation of any one of the international commissions, to revise or extend any provision of the final treaty, and submit their findings to the nations which they represent for ratification.

International Commissions

IN the world out of which the great war sprang as inevitably as sparks fly upward, a nation aggrieved by shipping, trade, or financial discriminations had only the alternative before it of submitting or retaliating. If it submitted, it nursed its grievance into suspicion and hatred; if it retaliated, the world witnessed a commercial war which increased ill-feeling. The need was great, and now after the war is even greater for international commissions which will investigate and offer a

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First Mortgage Bonds of \$500 and \$1,000 denominations.

Assets nearly five times entire loan.

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Allsteel will not warp, it will not sag—on the contrary, it looks to be, and is, the acme of business efficiency in the filing and storage of records.

Investigate its value to you as a business investment.

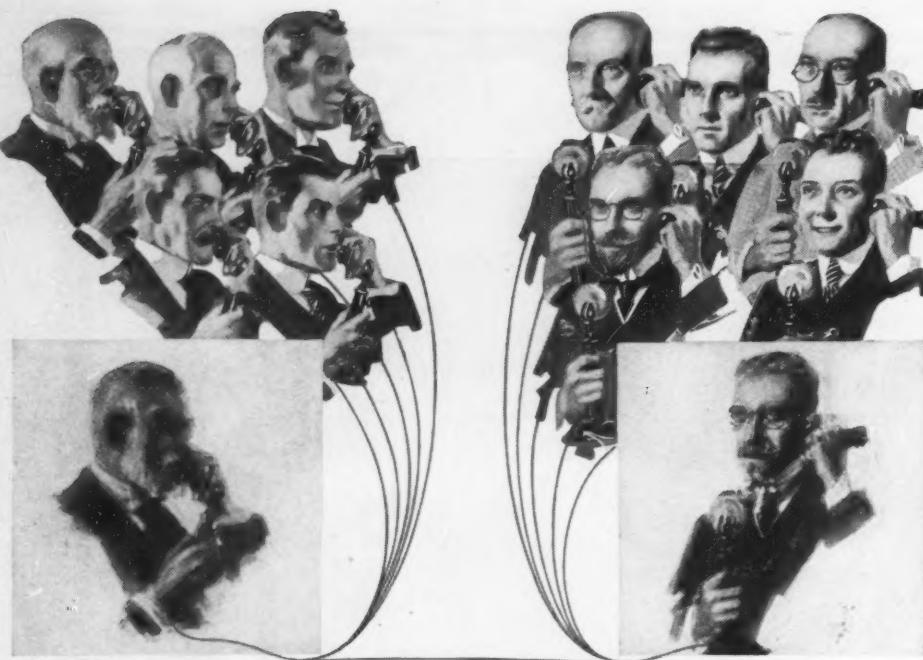


Write for a copy of
"The Allsteel Catalog."

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Multiplexing the Telephone

Marvel has followed marvel since Alexander Graham Bell invented his first simple telephone, the forerunner of the millions in use today.

In these last four decades thousands of Bell engineers have developed a system of telephonic communication, so highly perfected that the same crude instrument which at the beginning could hardly carry speech from one room to another can now actually be heard across the continent. This is because of the many inventions and discoveries which have been applied to intervening switchboard, circuits and other transmitting mechanism.

The vision of the engineers has foreseen requirements for increased communication, and step by step the structure of the art has been advanced

—each advance utilizing all previous accomplishments.

No one step in advance, since the original invention, is of greater importance, perhaps, than that which has provided the multiplex system, by which five telephone conversations are carried on today simultaneously over one toll line circuit, or by which forty telegraphic messages can be sent over the one pair of wires. As in a composite photograph the pictures are combined, so the several voice waves mingle on the circuit to be again separated for their various destinations.

By this wonderful development the Bell System obtains for the public a multiplied usefulness from its long distance plant and can more speedily and completely meet the needs of a nation of telephone users.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES



One Policy

One System

Universal Service

IN THE APRIL NUMBER

Secretary Franklin K. Lane, of the Department of the Interior, will tell you what the robust country west of the Mississippi is going to do to escape the slings and arrows of the war-to-peace period. The lessons this program contains for all parts of the

United States will be set forth in the secretary's clear-cut and vigorous style. There also will be contributions by Secretary of Agriculture Houston, J. Ogden Armour, Harry A. Wheeler, Francis H. Sisson, and others.

Avoid the consequences of April First by starting the month with this issue in your office.

THE NATION'S BUSINESS - RIGGS BUILDING, WASHINGTON, D. C.

solution to these commercial rivalries before they result in conflict.

The Allied Maritime Transport Council, which has rendered such genuine service during the war, suggests the field for an international shipping commission. The food and raw material executives of the allies may be regarded as the beginnings of the organization for handling world problems concerning food and raw materials.

Anarchy, before the war, reigned almost supreme in international trade relations. Because there were no international standards of competition, the only restraints on unfair practices by great export syndicates were those exercised by nations, and they were ineffective.

An international trade commission could be of great service in making competition between nations fair.

Investments and concessions in politically backward countries should also be under an advisory commission, which would view the problem in the light of international needs.

An international tariff commission, as I have indicated, is imperative. It would act as an arbiter in tariff disputes between nations, give publicity to concealed discriminations, investigate and report on the economic phases of any exceptions to the general rule of equality of treatment and opportunity, and at stated time submit, as should the international commissions, its reports and findings to the reassembled delegates of the nations.

[This article is an extract from a paper read at the Annual Meeting of the American Economic Association at Richmond, Virginia, December, 1918, and printed in the Proceedings of the Thirty-first Annual Meeting, March, 1919—THE EDITOR.]

Walker D. Hines

(Concluded from page 29)

fathers that "that country is governed best which is governed least." Yet he says "government is a serious task; it is a big man's job." "The greatest defect in our system of government," he has argued, "is its failure to fix responsibility. We have outlived the necessity of longer heeding Montesquieu's guarantee of democracy, a separation of legislative and executive functions." In other words: we must cease passing the buck in Washington, in our state legislatures, our county seats. This slang is not Mr. Hines', though the thought is.

As to politics, Mr. Hines is a Democrat. He confesses he is radical in his social thinking. He believes that the industrial processes of the United States would profit by being "socialized" more than they are. As to a violent upheaval in this country—well, no, because "we have at hand the means of coping with every crisis that can impend."

Mr. Hines' first public message on taking office was a plea for a closer get-together, a better understanding of all sides of our railroad problem. He favors Mr. McAdoo's plan for testing out the new situation a few years longer. "I am studying it," he says. "Congress should have an opportunity to study it. We must have the facts before we can pronounce."

A vigorous difference of opinion will not shock or disturb him. He will meet it calmly. He will generously and patiently examine every issue that is raised. He will go to the very bottom of this problem, as he has in the case of every other problem he has ever tackled. And no one will get beneath him—or put it over him either.

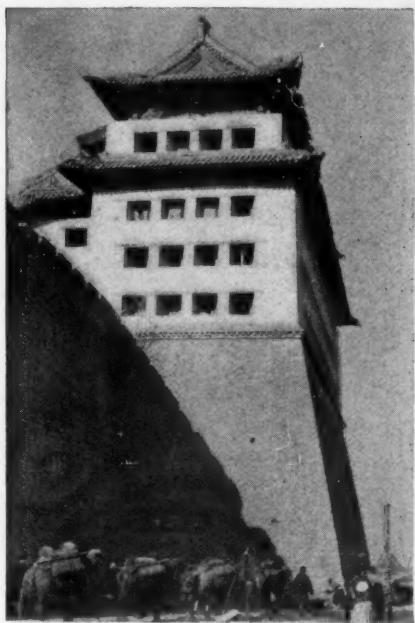


Photo by Fredrick Moore

In Barbaric Splendor the Walls of Peking Stand,
a Monument to the Tartar Rulers of the
Thirteenth-Century China

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The Great Wall typifies the scorn of ancient China for the Barbarians of the Outer World.

But more potent than the Great Wall are Mental Walls, barriers against intellectual commerce with the wider world.

America is looking across the Pacific to pagodas and rice fields and sloping temple roofs.

Asia plays an increasingly important part at the future Council Tables of the nations.

It has tremendous man-power.

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Germany's dream of Asiatic domination is over.

Now America awakens to its new position as a great world power—requiring all the genius of its people to understand and solve the difficulties of international politics and world organizations, as well as to accept the vast possibilities now presented for material achievement through foreign commerce.

The basis of such understanding is knowledge—a knowledge born out of sympathetic and vital interest in the life and development of other races. America must understand the Orient if a League of Nations or any kindred plan of international co-operation is to succeed. **America must know the Orient if the present period of material progress our country is now entering—the period of great foreign commerce and shipping—is to shine as brilliantly as the years of magnificent internal development we have seen.**

Our eyes must be overseas for peace and for prosperity. Europe knows how the East lives, thinks and acts.

Do we?

**The American Asiatic Association
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**President, LLOYD C. GRISCOM
Former Minister to Japan**

ASIA brings monthly into your home or office the Orient's contributions to art, and industry, commerce and wealth, religion and thought, and the part it is to play in the progress of civilization and world peace.

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The best of its kind and worth more alone than the cost of membership and subscription to ASIA, so say those who have seen it. It graphically tells its story, and at a single glance you can see the tremendous potential wealth of this vast continent. It shows you the great resources of gold, silver, copper, tin, iron, coal, silk, grain, cotton and other numerous resources and products, besides giving you the international and provincial boundaries, cities of first and second importance, main lines of railroads, caravan routes, etc.

It is useful to you who wish to be informed about this great world to the business man engaged in any commercial field; to your children who will find it an excellent supplement to their studies. The supply is limited. This offer is, therefore, temporary. Mail the coupon at once for the special offer.

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I desire to become an Associate Member of the American Asiatic Association. I send \$3.00 for one year's dues, and of this amount \$2.75 will be used for payment on a year's subscription for the magazine, ASIA. Send FREE, carefully wrapped the invaluable map of Asia, 34" x 38", showing economic resources.

Name.....

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Business or Profession.....

N. B. March, '19

The Nation's Business

The nation's business is not simply the business that is transacted in the Government departments at Washington.

The nation's business is the aggregate of the activities of every individual business unit.

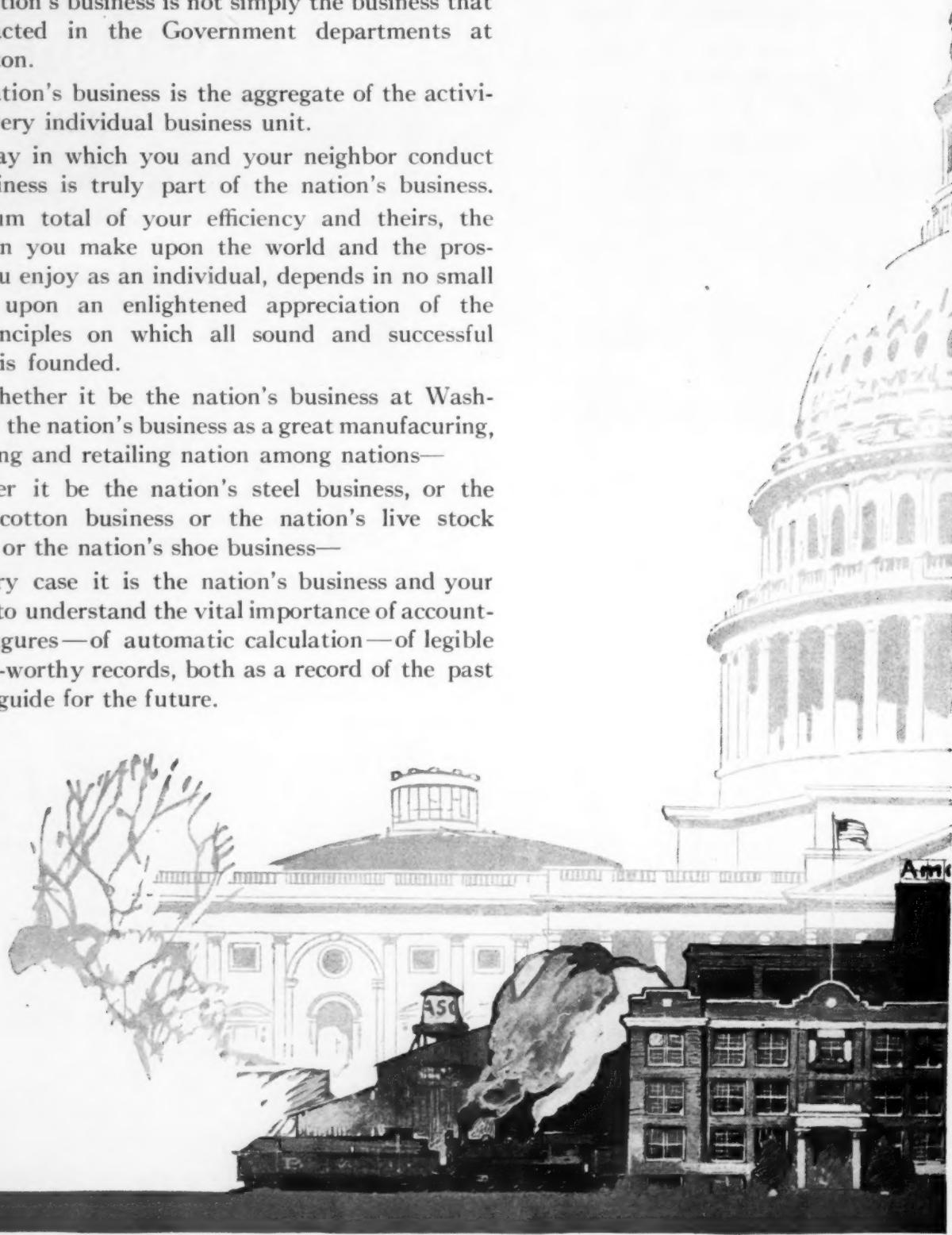
The way in which you and your neighbor conduct *your* business is truly part of the nation's business.

The sum total of your efficiency and theirs, the impression you make upon the world and the prosperity you enjoy as an individual, depends in no small measure upon an enlightened appreciation of the basic principles on which all sound and successful business is founded.

And whether it be the nation's business at Washington or the nation's business as a great manufacturing, wholesaling and retailing nation among nations—

Whether it be the nation's steel business, or the nation's cotton business or the nation's live stock business, or the nation's shoe business—

In every case it is the nation's business and your business to understand the vital importance of accounting and figures—of automatic calculation—of legible and trust-worthy records, both as a record of the past and as a guide for the future.



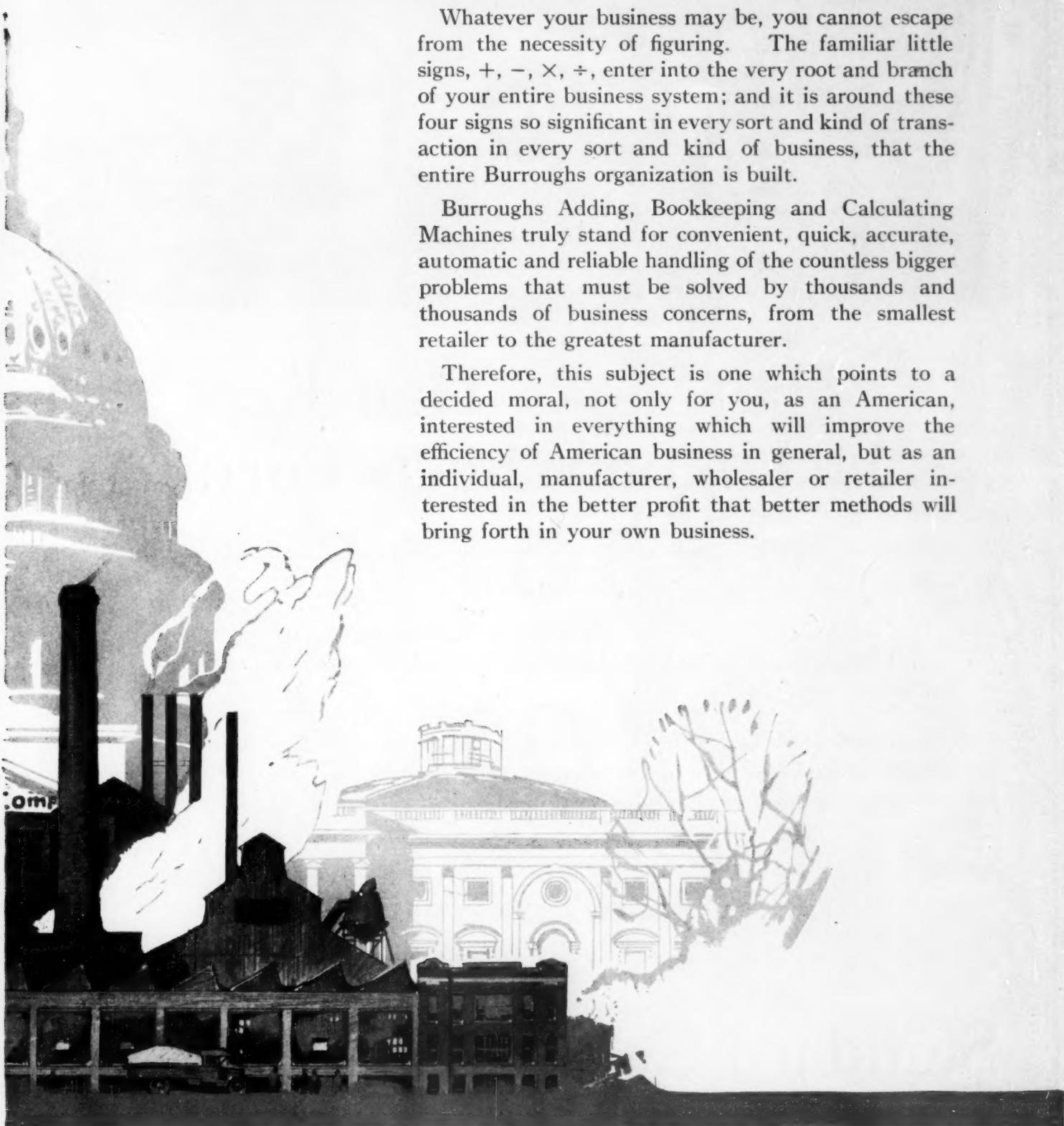
B FIGURING AND BOOKKEEPING MACHINES
PREVENT COSTLY ERRORS—SAVE VALUABLE TIME **PRICED AS
LOW AS \$125**
Burroughs

—and Your Business

Whatever your business may be, you cannot escape from the necessity of figuring. The familiar little signs, +, -, ×, ÷, enter into the very root and branch of your entire business system; and it is around these four signs so significant in every sort and kind of transaction in every sort and kind of business, that the entire Burroughs organization is built.

Burroughs Adding, Bookkeeping and Calculating Machines truly stand for convenient, quick, accurate, automatic and reliable handling of the countless bigger problems that must be solved by thousands and thousands of business concerns, from the smallest retailer to the greatest manufacturer.

Therefore, this subject is one which points to a decided moral, not only for you, as an American, interested in everything which will improve the efficiency of American business in general, but as an individual, manufacturer, wholesaler or retailer interested in the better profit that better methods will bring forth in your own business.



FIGURING AND BOOKKEEPING MACHINES
PREVENT COSTLY ERRORS—SAVE VALUABLE TIME

Burroughs

PRICED AS
LOW AS \$125



The Tanks That Kept The Home Wheels Turning

Every returned soldier has the right to demand his place in industry. Every wheel must be kept turning to provide it for him.

The service of the tank car, fulfilling multiplied demands; supplying fuel oil, lubricant and liquid raw materials will quicken the nation's activities in every direction.

Standard Tank Cars will be found more than equal to this responsibility. Built for serviceability under all demands. In material and workmanship they incorporate all that is modern and best in Tank car construction.

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St. Louis
Wright Building

OFFICES:
Chicago
Peoples Gas Building

WORKS: SHARON, PA.

Philadelphia
108 South Fourth Street

Standard Tank Cars

Making \$15-A-Day Men

(Continued from page 16)

reductions in wastage and ten percent less wage cost per gross in the training department than with workers of the same ability who were put directly into the shop and taught by the old method.

A great rubber foot-wear company with many plants finds that in its simple product the training department eliminates many would-be employees of good general capacity but without the particular aptitudes which its processes require.

Large scale knit goods employers estimate that the time of training new workers in their simple processes is shortened by periods varying from forty to sixty percent. Indeed, it is found in the simple trades that great numbers have been admitted and have later gone away in distress and given their companies bad names simply because they were not fitted to these occupations. These men should have been eliminated in training departments.

An airplane factory eliminated one-tenth of all new employees in the training department with the result that the turnover of the trained workers who went into the factory was one percent. a month against twelve to fifteen percent. among the old workers. The trained workers also sometimes produced a third more than the old workers.

Since the armistice many training departments are being used solely for the upgrading of regular employees, as no new workers are needed.

The U. S. Training Service has published records from some of our most celebrated factories. Some of these records show workers doing so poorly that they should be discharged but who are retained for various reasons. Some of them were taken into the training department and in eight days were brought to fair production, and in the following three weeks to the maximum production which the company expects from its best workers and for which it gives an extra bonus. One group that averaged 186 pieces per hour was raised to 332 in eight days of training and 396 in another three weeks. Imagine the satisfaction of both the worker and the employer!

As a test this company compared two workers whose production was 160 pieces per hour. It left one of them in the factory. He made no gain in 21 days. The other was taken into the training department for that period and in two weeks reached 233 pieces per hour and at the end of the 21 days exceeded 310 pieces, which was the company's maximum expectation for highly skilled workers on that special post!

The foremost manufacturer in the country in another line had the usual trouble in getting tool makers. He gets better and cheaper tools now from men earning one dollar per hour than he got before and is training all his tool makers to earn this \$1. He first sent into his training department those who continued to get about seventy cents. After bringing those up he took the next lowest, and so on. He is not afraid to pay one dollar for twice what sixty cents used to give him.

A great automobile plant is equipping two floors 600 feet long as training departments and proposes to put every new employee through this department which trains machinists, tool makers, draftsmen and accountants. He has tested training for a year.

For years it was a rule at the Krupp works at Essen thus to try out every new employee in the training department. Germany never bets on faces at the employment gate. She tries them out, as many employers are planning to do here now.

England and France have filled their plants with American machinery and adopted American methods. Their wages are half ours or less, yet per capita output is greater.

We must have a great volume of foreign trade, and to get it we must have a unit cost as low as any. Less than half of a fair day's output per man is impossible and ruinous.

It is so unusual for the leaders in manufacturing and in labor to work heartily for the same object that many manufacturers will wonder if it is now possible, but it is a fact that they are so doing now. They do not all work together but each works in his own field.

The Training Service has long-time production experts in each great industrial district, and not one of these men talks or thinks anything but training. Differences of opinion in other matters are never recognized. Many great open shop employers are acting as special representatives of the Training Service in their sections and therefore are sponsors for good faith. Representatives of labor are equally single-minded and earnest—an unbelievable situation a few skeptics will say, who may not have the courage to participate or investigate. Cooperation in this work is bringing new light and new hopes to all thus joined together.

The war has taught us something. Management and labor won the war and are out to win again—together.

Eight or ten of the largest associations of manufacturers are naming special committees to cooperate with this Service. In each major trade represented by these associations the Training Service either has or will have special training experts recommended by the associate committees of manufacturers who will develop methods of training in each trade *at the expense of the Service*.

Our Greatest Resource

THE mere money value of the human efficiency, the brain and muscle of the American working people, is carefully estimated at about \$250,000,000,000. This is five times the value of all other natural resources combined! Indeed, it is sometimes estimated as equal to the entire national wealth.

At best we shall have to give up a great share of the foreign trade we have recently enjoyed. We shall have to give up the greater part of the remainder unless we almost immediately develop the skill, the natural versatility, and the good will of the workers. No man can give good will and be happy who only half knows his job. A man likes to do what he can do well. He hates to do what he does poorly or without understanding.

In a Chicago factory making special cutting tools, fixtures, and so forth, a worker was away sick. A newly-trained operator was put at his machine and got out twenty-two parts per day as against the old worker's four. In another factory the trained workers were scattered throughout the shop and by example improved the production of the whole shop.

One of the saddest features regarding the 9,000 unemployable machinists mentioned at the beginning of this article is the statement of the government employment agent that "thousands of these men were almost good enough; they just missed it."

With all the fervor and intelligence with which American manufacturers fought the Hun they should now, with a training department in each factory, fight this incubus of unemployment, "hiring and firing" and ignorance. The "almost good enough" who are unemployed and the seventy-five percent, who are employed and giving less than half of a fair day's production can be, and in a few



Protect Your Capital

IN making an investment, ordinary caution suggests that you seek the best advice.

There are many persons who would have less to regret if they had consulted trustworthy bond distributors before investing. Such advice costs nothing; it may be worth a great deal.

The experienced bond men at the head of our various departments and in charge of our Correspondent Offices will be glad to suggest investments suited to your individual needs.

Our current offerings will be furnished upon request for H. 100.

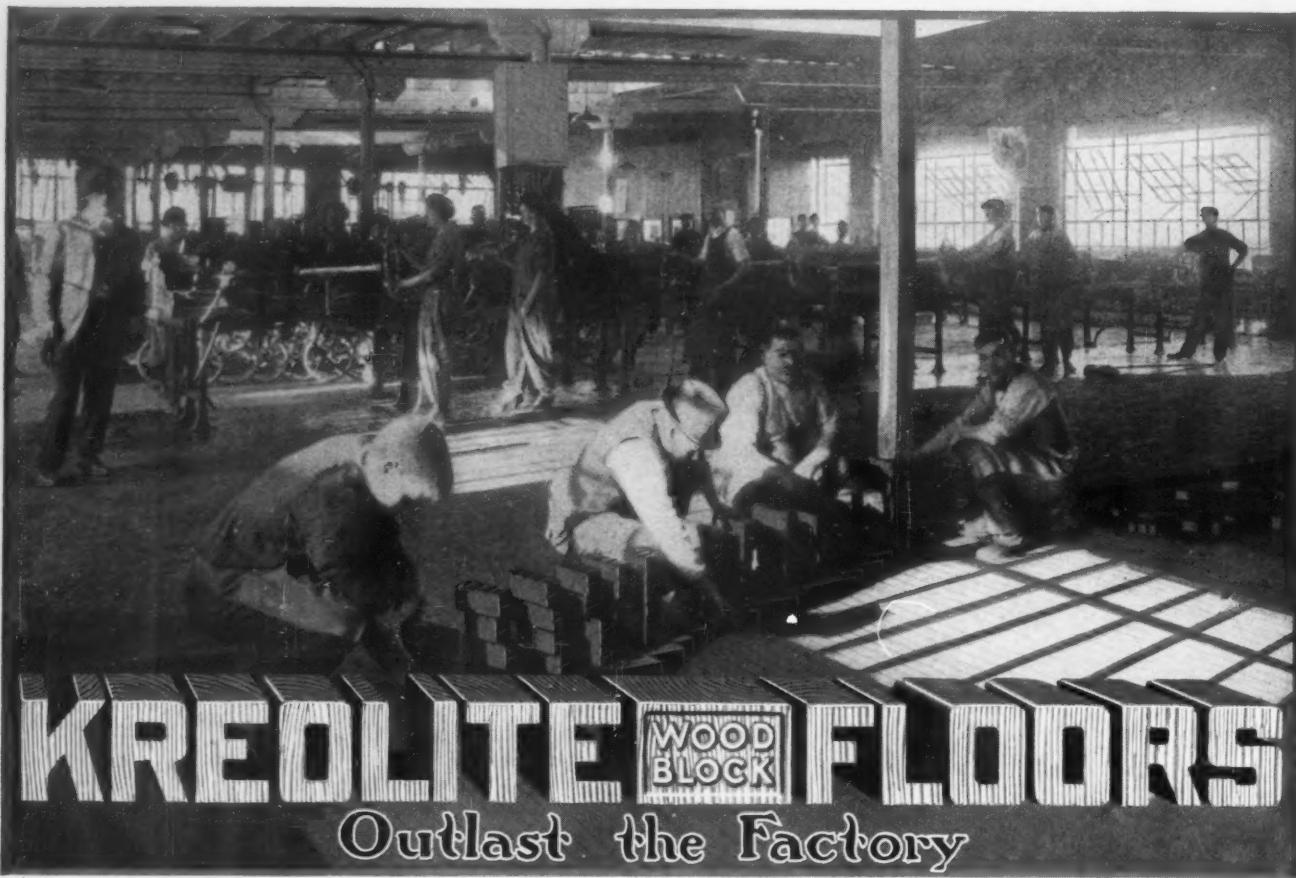
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Permanent Kreolite Floors Installed Without Stopping Production

Gemmer Manufacturing Company re-surfaces 13,725 sq. ft. of old floors while work goes on

Many factory managers find themselves facing serious factory floor problems.

They realize that holes and worn places in their floors are stopping full force production, wrecking factory trucks and taking top speed out of employees.

The solution of these difficulties lies in re-surfacing old worn floors with permanent Kreolite Wood Blocks.

They may be installed without confusion, while work goes on uninterrupted.

Once down they actually "outlast the factory," so great is their resistance against wear and tear.

Thoroughly impregnating the well seasoned selected blocks with Kreolite Preservative Oil by our own patented process, absolutely insures them against decay.

Only the tough end grain wood fibre is exposed in our method of laying.

Kreolite floors cannot splinter, chip or crumble. They are there to stay.

They are so warm, resilient and satisfactory that every man in the factory ap-

preciates their comfortable feeling under foot and works the better for it.

There is no substitute for Kreolite Wood Block Floors. No other material is nearly so permanent, resilient and quiet.

Here is the way our technical men solved the Gemmer Manufacturing Company's floor problems.

Their floors consisted of 2" yellow pine untreated sub-flooring, topped with $\frac{3}{8}$ " hard maple, mill type construction floor, which had become splintered and practically useless through heavy factory traffic.

We advised Kreolite grooved blocks for re-surfacing. These were placed directly on the maple flooring except in worn spots, which were leveled up before the blocks were laid.

The joints were filled with Kreolite pitch through the grooves and formed a solid, waterproof and wearproof floor.

This was done under the personal supervision of one of our Engineers without stopping production.

Commenting upon this work the Gemmer Manufacturing Company of Detroit, Michigan, writes: "We found it possible to install this floor without shutting down our assembling department."

As evidence that the installation was entirely satisfactory The Gemmer Manufacturing Company have since placed two additional orders amounting to 24,525 sq. ft. of Kreolite Wood Blocks.

Our technical men may be of service in solving your factory floor problems. If so their services will be gladly given without obligation to you.

Kreolite Wood Block Floors are especially adapted for use in machine shops, foundries, warehouses, loading platforms, area ways, roundhouses, paper mills, tanneries, stables and garages.

For more complete information, our book on Kreolite Factory Floors contains facts of interest to Construction Engineers, Architects, Industrial Executives and Contractors. We will be glad to send you this book upon request.

The Jennison-Wright Company, Toledo, Ohio

Branches: New York, Chicago, Philadelphia, St. Louis, Pittsburgh, Cleveland, Detroit, Toronto and other principal cities.

places are being, transformed into happy and satisfactory producers.

A great Massachusetts company is taking regular employees into the training department, and in eight weeks, without loss in production, is making them competent on every major machine in the plant. Think of the value of new versatility like this!

The transformation by training, if general, would increase the returns from labor more than \$1,000,000,000 per year with an equal saving in overhead. This new margin would afford a happy readjustment of wages, profits, and sales prices, and nothing else will.

Manufacturers have been frightened from training by the "education" bugaboo, a mountain of mist. They have thought good training to be beyond their power. They know that three and four year tradeschool and apprentice courses are not within the reach of the multitude. Only now they are discovering that training is as simple as learning to eat with a fork. The workman is trained for one department and later, if wanted in another, he returns to the training department to be fitted for the other position. Education is thus a continuous process making every adjustment and always keeping the force fit.

The separate training department will not fit all plants. It shields the learners. One superintendent said: "What's the use of a partition anyway?" He removed it. As a result all the ills of the shop affected the learners, and morale declined. It is better to teach to do perfectly and then follow up each learner in the factory and insist on the same performance there.

However, the plant and the nature of the product determine the method in each case; but that training can and must be organized as a definite and great factor in every business is the judgment of so many leading manufacturers and associations as to warrant an appeal to every producer to investigate at once and to do his share. The results already attained should induce every association of commerce and of manufacturers to get all the facts and courageously pass upon them. We are in for quick readjustment or increasing maladjustment.

Industry's War Foundlings

(Continued from page 19)

times. The Government has not the authority to impose import embargoes. Exemption from internal taxation, or special privilege in this regard, is generally considered an inexact and unscientific method of favoring certain interests. Government production in normal times is often fraught with political difficulties, and existing laws would make it hard for the Government to place large standing orders with certain manufacturers or interests to insure stability of market for some of the essential materials in future years.

Other difficulties of determining at this time a permanent and uniform line of state action for the future, grow out of the fact that industrial forces are never stable. Within a few weeks conditions may change in such a way as to eliminate one of the commodities mentioned in this discussion as pivotal, or to add others not now apparent in our search for key industries. New methods of production, new sources of supply, new lines of demand—these factors contribute to constant mutations in industrial conditions. Besides, who in this particular period of world readjustment can foresee the development of future international relations? Who knows how free will be the inter-play of industrial competition between nations? How can we say now what we should do with our im-

TO prepare and distribute the necessities of life carries with it a great responsibility. To meet this responsibility demands two essentials—a policy, and an organization able to carry out that policy.

* * *

Our policy toward each user of our products is expressed in our slogan "*The Wilson Label Protects Your Table.*" This is our code. It is our pledge. The Wilson W-shaped label is your guaranty that back of it is all the honesty of purpose, skill and expert ability humanly possible. It means that every Wilson product is selected, handled and prepared with the respect due the foods you will serve at your own table.

* * *

This respect governs our work. Your own mother could not be more careful, more thoughtful or have more consideration for your enjoyment when she prepares the favorite dish for the family.

* * *

The Wilson organization is one of thinkers—men able to make the Wilson policy genuine. We use our machinery to manufacture; we use thought in our management and our distribution. No man who is not capable of taking the customer's viewpoint is big enough or broad enough to share in the management of this company.

* * *

Our guaranty of Wilson products is unconditional. That is the only guaranty worth while, and when we make it we rely upon the fairness of every user of our products. We have found our customers fair, and we mean that they shall always find us just the same way—and that our label shall stand for this policy of ours unfailingly.

* * *

We like to feel that the people who ask for Wilson products are our friends. We value their comment—whether praise or criticism. It helps us to continue to build this institution and to hold the confidence of the public.



Majestic Ham, Bacon and Lard
Certified Canned Fruits, Vegetables, Meat Products
and Oleomargarine

The Wilson Label Protects Your Table

By Simply Pressing A Button

**The Manufacturer can make known his product
everywhere with the Poster**

To his sales force he simply speaks the word. In the space of days or weeks a great picture appears like magic on thousands of poster boards from coast to coast. Every one of the boards has been selected on the basis of the number and kind of people who pass it daily; and from these boards all material that is not first-class and unobjectionable is rigidly excluded.

It was done simply and easily—by a word to the great clearing house of poster advertising that acts as the nerve center for the big national poster advertising machine. It was done with the skilled help of experts who are in close and intimate contact with every poster board company in the country. This poster advertising clearing house has on file exact information on that and every other essential point. In addition it is in touch with the greatest artists and the best lithographic firms, and with every advertising bureau of importance.

That is why a word does the business. That is why the pressing of a button can set the whole machine in motion. It is all there, coordinated, organized, ready for use.

Archimedes said that if he could have a lever sufficiently long, with a fulcrum and a place to stand, he could move the earth. The man who presses that button, and so puts in motion the vast machinery of the poster advertising clearing house, does a thing that makes the dream of the great mathematician seem all but commonplace. For he moves, not the ponderable earth, not the substance of things seen and felt, but rather the hearts and the minds of millions of men.

He does it by pressing a button. He does it with a picture. He does it by using a harnessed force.

IVAN · B · NORDHEM COMPANY

Poster Advertising in the United States and Canada

8 West 40th Street New York City
Bessemer Building Pittsburgh, Pa.

OFFICES IN
CHICAGO, MINNEAPOLIS

Canadian Representative
THE WADSWORTH-NATHANSON CO., TORONTO, CANADA

portant industrial infants in five years from now, or how we should do it?

All these conditions—the positive as well as the uncertain—seem to point to one conclusion: That there should be some permanent government agency to study the entire problem progressively, to formulate policies and to frame schemes for promotion of key industries with due regard to general and particular phases of public interest. To a limited degree it should have executive functions. It might use some of the instruments of action already mentioned.

This body—let us call it a Special Industries Board—might have duties similar to those of the Tariff Commission, to study domestic and foreign conditions. It might partake of the natures of the Federal Trade Commission, the late War Industries Board, the War Trade Board, the Department of Commerce and the Treasury. It might consist of a representative from each of these departments, and one from the State Department to assist in problems requiring knowledge of the trend of development of international relations. Its membership on its staff should include industrial and commercial experts. Perhaps the functions of the Tariff Board might be enlarged to make the Board a suitable body.

Whether or not such a body be created, our industrial war infants and our business babies of the future must be dealt with individually. Each will require special nourishment, separate treatment, thoughtful care. So at this time the most sound suggestion seems to be that we have some sort of a government mothering board. Thus the essential babies may thrive and not be coddled.

Trade Truths That Hurt

(Concluded from page 54)

to the fact that we cannot at present build them. We want great ship yards and work for them to do but all that will come in time with the development of a merchant marine. First get the ships and put them in operation quickly."

When this war came, the German ships were in all the waters of the whole world. Today our President goes to Europe on a German ship of a kind that not a single yard in this country could have built before the war.

We want the barriers removed from our shipping. Today if a vessel of given tonnage flying the American flag goes through the Panama Canal, it pays a good deal more in tolls than another ship of the same tonnage flying a foreign flag—and it is our own canal at that. It is absurd that our Government should so measure our own tonnage as to exact from our ships heavy penalties.

We have the same difficulty with wages and other costs. If we are going to have commerce with the world we must have these restrictions taken off the shipping industry. There is no other help for it.

This leads to another point. If we are going to have foreign trade we must have some better financial and selling methods than we have had. It is strange how some people in this country think they can get foreign trade. They sit down in New York, or some other American city, and prepare a circular in English, quoting something in pounds or gallons and in American dollars, f. o. b. New York, and send the circulars down to South American countries where they speak nothing but Spanish or Portuguese. Then they sit down and wait for orders.

Even if anybody gets the circular translated it remains Greek to him. The way he wants to buy is in kilos or litres, and in the money of his

own country, f. o. b. his own port. How did the Germans get South American trade? It is an interesting story.

A good many years ago, when the Germans made up their minds that they were going to do business in South America, they made a cartel—always a cartel! They employed a number of men representing various industries—one for textiles, one for hardware, and so on—and they said: "Now, boys, go to South America and study the whole situation. You are not to sell a thing. Get samples of all the print cloths with the colors, weights, widths; do likewise with reference to all other industries you represent. Tell us why these goods are called for in South America, and be sure and give us all the information about prices, credits, etc." These agents spent two solid years in accumulating this information. They went back to Germany and reported the facts; and then the Germans moved on the South American business—and got it. Why shouldn't they? There is no other possible way to do it.

We must have a better system of exchange—getting our money to this country—than now exists. We must not be at the mercy of foreign bankers and foreign banking methods. Fortunately some of our great banks are reaching out into foreign countries to establish financial systems; depositories where money can be deposited and transferred without heavy loss of exchange, to enable us easily to carry on our financial operations.

There is another thing we must do if we are to have foreign trade. At home we must learn to deal in foreign securities. Go into the London stock market and look at the stocks currently traded in there. You will find most unfamiliar names—tea plantations in Ceylon, rubber plantations in South America and India, railways of which you have never heard.

About fifteen years ago I talked with a very intelligent, observant gentleman who had traveled extensively all over the world. "Tell me," I said, "what American products have you found universally in your travels."

"Oh," he replied, "lots of them."

"What are they?" I asked. "Name them."

He replied: "Singer sewing machine, Remington typewriter, Eastman kodak, Vacuum oil."

"Is that all?" I said.

"Yes," he returned, "that is all."

Who has the rest of the trade? The Germans, the English—just a few American specialties on universal sale all over the world—and the Germans and English taking all the rest.

If we want to get foreign trade we must go after it. We cannot do it by sitting at home.

If we are going to get foreign trade, we must go after it in an intelligent, wise, systematic way, and have, on the ground, proper organizations with the necessary capital. If we once wake up to the problem I am sure America will not continue to lag behind other nations in the overseas trade.

On page 66 of the February *Nation's Business*, the announcement was made that the annual meeting of the Chamber of Commerce of the United States would be held in St. Louis just before the annual meeting of the National Foreign Trade Council in Chicago. This was an error. The convention of the National Foreign Trade Council will be April 24, 25, and 26, while the meeting of the National Chamber will follow it on April 29, 30, and May 1.

Our Foreign Department

is equipped in every detail to handle your foreign business intelligently and efficiently.

Bills negotiated and handled for collection.

Cable orders of payment executed in all parts of the world.

Commercial Letters of Credit granted.

Drafts issued on all points.

Foreign monies bought and sold.

Contracts for exchange concluded.

Travelers' Letters of Credit and Travelers' Checks issued.

We will be pleased to supply information regarding any foreign financial transactions.

The First National Bank of Boston

Capital, Surplus, and Profits, \$27,000,000

Resources . . . Over \$250,000,000

Branch at Buenos Aires, Argentina

Put the Power of Emphasis Into Your Letters

Just as you do with the Spoken Word!

"Many
Typewriters
In One!"



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Is The World League Good Business?

(Concluded from page 21)

This question of taxation is coming home to the business man as a factor in cost of production more than ever before. This war proved the possibility of a colossal disaster, even in so far advanced a civilization as ours was. We admit this to our bitter sorrow. Now, if as an aftermath we leave the world with no greater protection than we have had in the past, it will lead to a period of uncertainty such as modern civilization never has known. When will the next one come? What will it be in proportion to the last?

Countries would have to arm more than before, even in this country. We, as the richest country in the world, would have to be in a position to protect ourselves. The cost and its burden on our business and on the world would in turn be enormous. This country has been one of high manufacturing costs, our scale of living being different. And costs would become still higher.

Taking Care of the Surplus

MEANWHILE, even before the war, we had enormously developed our machinery for production in this country. Greatly amplified means of production are not embarrassing if the means of communication with the backward countries of the world are easy and reasonably cheap, the latter make possible the absorption of the products of manufacturing nations.

But their ability to absorb means investment in such countries. Investment is necessary to their development and the investment in turn means stability of conditions. In the past militaristic power was used by various nations to stabilize the investments of their nationals.

The method was this: The surplus funds of a nation went in through the medium of its business men and bankers to the exploitation of some type of concession and the weak governments gave unusual inducements. If the governments were not stable or relations with a neighbor were uncertain, the more powerful nation attained its objective by means of the warship and the landing force.

In the last twenty years that method of obtaining and protecting investment abroad through the dominance of weaker nations by the more powerful did not obtain to anything like the extent it did two or three decades ago. But, nevertheless, it was about the only means for protection of investments.

Now, the United States did not do this to any considerable extent because the public sentiment of the country would not support it. There was no popular support for the plan of sending warships to the lesser nations to protect investments of Americans. Our people have not been ready for it. They did not believe in it. And yet from the economic standpoint that development was necessary.

The new League of Nations really is a remarkably good start. We have made a really big beginning. The same criticisms offered against this plan were offered against the first draft of the Constitution of the United States. It is only the application of much the same idea on an international scale. There is nothing fundamentally new. The idea is very old and it has taken the Great War to make a real start on it. You will notice too, as an indication of the growing distrust in the world in the use of military power that thus far the only direct power they employ is the economic power—a tremendously effective power.



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Col. Albert M. Miller, U. S. A., (in command) Zone Supply and Port Storage Officer at Baltimore, says: "*There is a decided advantage in Baltimore over that of the northern ports in both freight differentials and in the ease and speed with which supplies can be received and floated.*" Continuing, he says, "*There is no other port that has the railroad and natural harbor facilities combined as possessed by the City of Baltimore.*"

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Your building operations can start while detailed plans are in progress—saving time and insuring earliest occupancy.

Our field forces are experienced, energetic and reliable. By thorough team work, we have made unusual speed records. A building under construction is not earning money for you.

You may learn of our integrity and ability and the unusual character of our organization, from our clients among the leading firms of the country.

Call us for early consultation. Write for our booklet, "The Art of Building Within the Estimate."

Wells Brothers Construction Co. BUILDERS

914 Monadnock Building, Chicago

Prices Declining

(Continued from page 46)

and they are not all back yet. There is a general disposition to provide employment in some form or another by common action, by individuals and the Government, both State and Federal, rather than wait the slow process of natural evolution, which in common phrase has to go through a period of liquidation before demand again appears general as the forerunner and constructive factor of the coming era of prosperity. The principal difficulty, so far as the individual is concerned, is the instinctive feeling that a period of falling prices is an unfitting and uneconomical time in which to embark in constructive and development work.

Labor Efficiency Improves

MEANWHILE the labor situation is further complicated by an increasing number of strikes, in many cases for shorter hours, and in others, paradoxically enough, for higher wages. The efficiency of labor is rising because other jobs can no longer be had for the asking, and there is a sober realization that the days of unduly high priced emergency wages have gone for good. Reductions in prices of certain finished articles are due to the fact of this greater efficiency in labor and not to reduced wages, of which practically nothing is heard. Many employers have frankly stated to their men that present wages must be accompanied with greater efficiency and the appeal has gone home so that there is reduced cost of operation in such cases. The tribe of young boys and girls, who were the only industrial recruits to be had during the last months of the war, are fast giving place to older, more experienced and more efficient working men. Still in the country districts, farm labor is scarce and high priced and the serious aspect of the coming crop season is the almost sure shortage of farm hands. Despite all of our hopes and preachments to the contrary, the unpalatable fact remains that it is easier to keep a boy on the farm than to get him back there after he has once left.

The metals in general face a period when supply will probably more than equal demand, and when lower prices are likely to prevail.

Coal mining has already arrived at that stage, and the situation is not helped by a continuing mild winter.

The lumber interest has premonitions of a large export demand, and is stayed meanwhile by good buying from the railroads, its far largest customer.

South's New Bounties

THERE is still a plentiful lack of building activity here, and there are few signs of that demand from abroad for building materials for that rehabilitation of devastated Europe on which so many hopes were founded. There is much to be done in the way of financing and arrangement before we shall feel the full impulse of the foreign call for our lumber and structural steel.

The situation in the South has improved in the cotton sections, because of somewhat freer selling despite an industrious and widespread propaganda which seeks to maintain cotton around thirty cents by withholding the product from the market until it reaches that figure.

In reality the backbone of the present widespread prosperity in the South lies in its diversified crops and fast growing herds of cattle, sheep, and hogs. States in the South which only a few years ago were extensive importers of packing house products, now ship annually

Direct Foreign Banking Facilities

THE Guaranty Trust Company of New York—with offices in New York, London, Liverpool, Paris, and Brussels, and affiliations and connections with leading banks throughout the world—offers a direct and comprehensive foreign banking service for trade with all countries.

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Our London and Paris Offices are officially designated United States depositaries. They are American institutions conducted on American lines, and are especially well equipped to render banking service throughout Europe. Additional branches are being established in Liverpool and Brussels. We have our own special representative for the Scandinavian countries. Our *direct* connections in Italy and our affiliation with the Italian Discount and Trust Company of New York enable us to offer exceptional facilities throughout Italy. The Mercantile Bank of the Americas at Barcelona is a depositary for the U. S. Government; through this connection we offer *direct* service with Spain and Portugal.

South and Central America

We have *direct* connections with the leading financial institutions in Argentina, Uruguay, Chile, and Brazil, and have, in addition, a special representative in Buenos Aires. Through our affiliation with the Mercantile Bank of the Americas and its connections, we cover Peru, Northern Brazil, Colombia, Ecuador, Venezuela, Nicaragua, Honduras, Guatemala, and other South and Central American countries.

Cuba and West Indies

Through the American Mercantile Bank of Cuba, at Havana, we cover *direct*, Cuba and the West Indies.

British India, Dutch East Indies, Straits Settlements

We are the representative in the United States of the Tata Industrial Bank of India, and render *direct* banking and merchant service throughout British India. We are also correspondents of the leading Dutch banks established in the Dutch East Indies and the Straits Settlements.

Africa

Our *direct* connections with the National Bank of South Africa, at Cape Town, and its many branches in the Transvaal, Rhodesia, Natal, Mozambique, etc., assure our customers of efficient banking service throughout the Union of South Africa.

Australia and New Zealand

Through our *direct* banking connections and our special Australian representative, we offer a comprehensive service for trade with Australia and New Zealand.

China, Japan and the Far East

Through our affiliations with the Asia Banking Corporation we negotiate, *direct*, banking transactions of every nature in China, Manchuria, Southeastern Siberia, and throughout the Far East. The Asia Banking Corporation has its main office in New York and is establishing branches in these important trade centers: Shanghai, Pekin, Tientsin, Hankow, Harbin, Vladivostok. We are also official correspondents for leading Japanese banks.

Foreign Trade Bureau

Our Foreign Trade Bureau collects and makes available accurate and up-to-date information relating to foreign trade—export markets, foreign financial and economic conditions, shipping facilities, export technique, etc. It endeavors to bring into touch buyers and sellers here and abroad. The facilities of this Bureau are at the disposal of those interested.

We invite inquiries regarding the most economical and practical methods for financing foreign business.

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thousands of car loads of cattle and hogs to markets north of the Ohio River. Along with this, as one of its causes, goes very greatly increased production of all grains as food for both man and beast. The South is also raising very largely those dairy products which it formerly bought from its sister states in the North and West.

The growing winter wheat keeps its great promise almost unimpaired. Fears and apprehensions are plentiful enough as to the hurt it may have received because of lack of snow covering, but confirmations of actual damage are few. Throughout the country the soil is moisture-soaked, and this is bringing great hopes of coming crops in the former drought stricken sections of Texas and Oklahoma.

Much winter plowing is being done, north to the Canadian border, because of continued open weather.

There are bargain days abroad in all winter goods, especially clothes, because of large stocks carried over. In woolen fabrics there is an apparently well-founded fear of lower prices of wool because of the enormous stocks in the hands of the Government.

There is an undercurrent of concern as to the social unrest which possibly awaits us but which has shown small effect so far upon business activities. On the one hand there is an ignorant fear which fails to analyze the situation correctly and sees no other remedy than severe repression, and on the other the common sense of the many which always stands for law and order and which likewise seeks to cure unrest by removing the cause. In such matters we often lose sight of the tremendous fabric of underlying strength in American society because of the great property owning among the many who are thus imbued with conservative judgment and a sense of responsibility.

Back to Natural Trade Laws

THE most significant economic reaction from the war is the apparently general desire that Government supervision and regulation be removed as fast as possible from all business activities and that the natural laws of trade be allowed to resume their sway. This is especially noticeable in the cost of food, which is becoming a serious economic and social problem. The simple facts are that there are enormous food supplies of all descriptions in this country, far more than we can possibly consume between now and the next harvest. There is, of course, to be considered the question of what hungry Europe will need but that problem seems nearing solution. Meanwhile, the present high prices are due solely to Government regulation. If the Government changes the form of its guarantee to the farmer on wheat, so as to pay the farmer the difference between the natural market value and the Government guarantee, and ceases its action, month by month, in maintaining the price of hogs, there will be an immediate and appreciable decline in the price of all grains, of all meat products, of feed for live stock, and probably also of dairy and poultry products, as these commodities usually act in sympathy in price changes. It is the growing realization of these facts which is causing a widespread feeling that from now on there should be greater consideration paid to the needs and wants of the great consuming public.

IDEAS multiply in a democracy. The Navy Department or the Naval Consulting Board passed upon 110,000 of them during our period of active war, and the General Staff of the Army reflected upon 25,000 more.

Make Your Plant A Better Place to Work In

When the men come back who have served in the Army, Navy, and Marines, they will be bigger, better and healthier men in every way than they were before

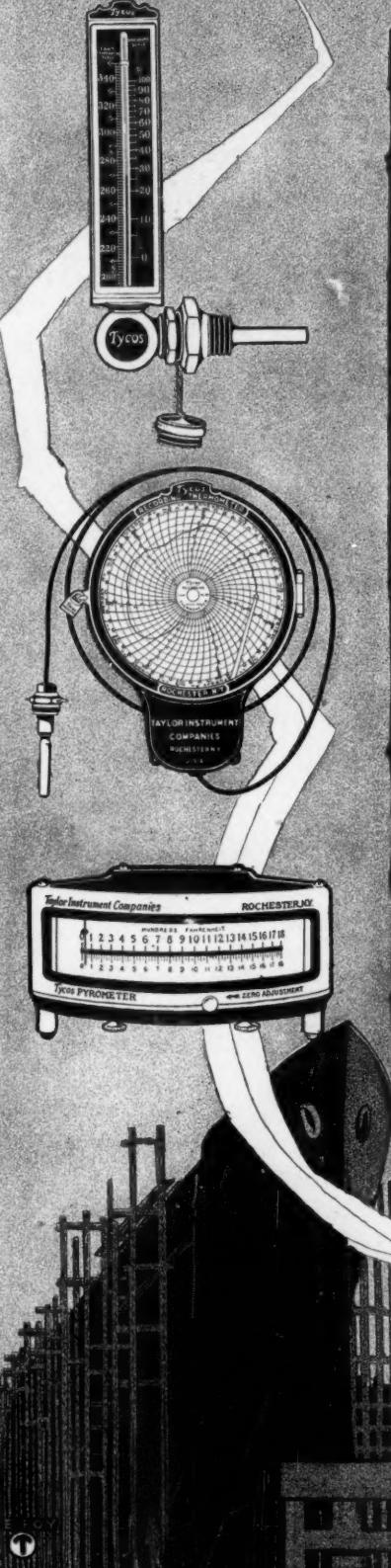
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Dallas, Parker Bros., 109 Field
street

FOREIGN OFFICES
London Manchester Birmingham Cardiff Glasgow Paris

Books for the Salesman

(Continued from page 56)

JEWELRY

Kennard, B. E. Department Store Merchandise Manuals: the Jewelry Department. 1917. Ronald, N. Y. \$1.25.

LEATHER GOODS

Lehmann, M. A. Department Store Merchandise Manuals: the Leather Goods Department. 1917. Ronald, N. Y. \$1.25.

MAIL ORDER SELLING

International Library of Technology. Long Range Salesmanship, In Selling to Dealers, Section 17. 1912. Inter. Cor. Schools, Scranton, Pa. \$5.

Barroll, E. C. Making Money in the Mail Order Mint. 1915. Rollins & Co., Box 5272, Boston. \$1.

Parsons, C. C. Mail Order Selling. In his Business Administration, p. 186-195. 1909. Shaw, Chicago. \$3.

MILLINERY

Aiken, C. R. Department Store Merchandise Manuals: Millinery Department. 1918. Ronald, N. Y. \$1.25.

NOTIONS

Souder, M. A. Department Store Merchandise Manuals: the Notion Department. 1917. Ronald, N. Y. \$1.25.

OFFICE APPLIANCES

Selling Methods: Office Appliances and Supplies. Shaw, Chicago. \$1.50.

PATENTS

Edelman, P. E. Selling Plans. In his Inventions and Patents, p. 153-155. 1915. Van Nostrand. \$1.50.

PRINTING

Basford, H. M. How To Sell Printing. 1916. Oswald Pub. Co., 23 City Hall Place, N. Y. \$1.50.

Francis, Charles. Problems in Salesmanship. In His Printing for Profit, p. 164-181. 1917. Bobbs-Merrill Co. \$3.

REAL ESTATE

Carney, W. A. How To Buy and Sell Real Estate At a Profit. 1905. W. A. Carney, 1465 Spring St., Los Angeles, Cal. \$2.

Gahagen, W. R. How To Sell Real Estate. In his How To Conduct the Real Estate, Insurance, and General Brokerage Business, p. 28-39. 1916. Realty Book Co., 5905 Euclid Ave., Cleveland, O. \$1.

Melberg, P. L. How To Sell Real Estate. 1906. Realty Book Co., 5905 Euclid Ave., Cleveland, O. \$2.50.

Selling Methods: Real Estate. Shaw, Chicago, Ill. \$1.50.

RETAIL

Barrett, H. J. Selling Behind the Counter. In his How To Sell More Goods, p. 146-173. 1918 Harper. \$1.50.

Brisco, N. A. Fundamentals of Salesmanship. 1916. Appleton. \$1.60.

Fisk, J. W. Retail Selling. 1918. Harper. \$1.

Fisk, J. W. Salesmanship; a textbook on retail selling. 1914. Merchants Pub. Co., 243 W. 39th St., N. Y. \$1.50.

Kennard, B. E., editor-in-chief. Department Store Manuals. 25 vols. when completed. Volumes published are given here in their proper groups. Ronald, N. Y. \$1.25 each.

Maxwell, W. Salesmanship. 1914. Houghton, Mifflin. \$1.

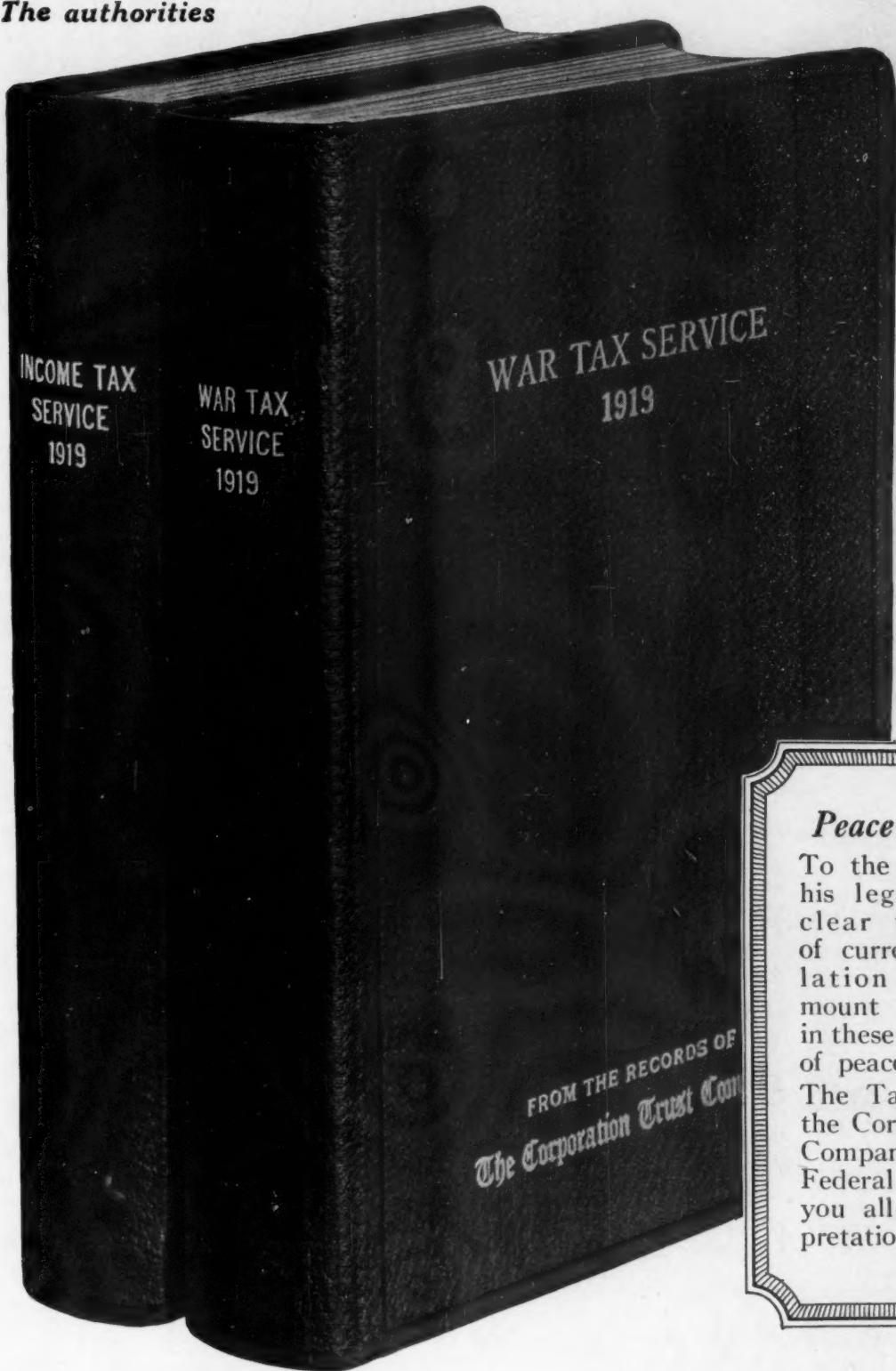
Nystrom, P. H. Economics of Retailing. 1915. Ronald, N. Y. \$2.

Nystrom, P. H. Retail Selling and Store Management. 1915. Appleton. \$1.50.

Selling Methods: Retailing. 1914. Shaw, Chicago, Ill. \$1.50.

U. S. Bureau of Education. Department Store Education, an account of the training methods developed at the Boston School of Salesmanship. Bulletin, 1917, No. 9. Supt. of Documents, Washington, D. C. 15 cents.

U. S. Bureau of Education. Service Instruction of Department Stores. In Service Instruction of American Corporations, p. 5-30. Bulletin, 1916. No. 34. Supt. of Documents, Washington, D. C. 15 cents.

The authorities*Peace and Taxes*

To the executive and his legal advisors a clear understanding of current tax legislation is of paramount importance in these puzzling times of peace.

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SECURITIES

Foley, William. *Bond Salesmanship*. In Sprague's *Bonds As Investments, Securities*, p. 72-76. American Academy of Political and Social Science, 36th St. and Woodlawn Ave., Philadelphia, \$1.50. J. C. Winston Co., 1006 Arch St., Philadelphia. \$2.

SHOES

Evans, A. L. *Educational Training Course; retail shoe salesman's guide*. 1912. Charles Evans, 1413 Pratt Ave., Chicago. \$2.

International Library of Technology. *Selling Shoes. In Selling as a Business Force*, Section 12, p. 99-112. 1916. International Textbook Co., Scranton, Pa. \$5.

SPECIALTIES

International Library of Technology. *Selling of Specialties. In Selling to Dealers*, Sections 15 and 16. 1912. International Textbook Co., Scranton, Pa. \$5.

Jones, J. G. *Branded Staples and Specialties. In his Salesmanship and Sales Management*, p. 19-27. 1917. Alexander Hamilton Institute, N. Y. Not sold by publishers except to their own students. May often be bought second hand.

Seelcman, E. H. *Specialty Salesman*. 1909. Progress Co., 515 Rand-McNally Bldg., Chicago. \$1.

STATIONERY

Lehman, M. A. *Department Store Merchandise Manuals; the Stationery Department*. 1917. Ronald, N. Y. \$1.25.

TEXTILES

Thompson, E. B. *Department Store Merchandise Manuals; the Cotton and Linen Departments*. 1917. Ronald, N. Y. \$1.25.

WHOLESALE

International Library of Technology. *Selling to Dealers. In Selling to Dealers*, Section 14. 1912. International Correspondence Schools, Scranton, Pa. \$5.

WOMEN

Butler, E. B. *Saleswomen in Mercantile Stores*. 1912. Russell Sage Foundation, N. Y. C. \$1.

Gilbert, Eleanor. *Wholesale or Outside Selling; the "Traveling Saleswoman"; opportunities in the retail and department store. In her Ambitious Woman in Business*, p. 296-343. 1916. Funk & Wagnalls. \$1.50.

O'Leary, I. P. *Sales Force, or Floor Positions of Women. In her Department Store Occupations*, p. 74-81. 1918. Cleveland Foundation Survey Committee, 612 St. Clair Ave., N. E., Cleveland. \$2.50.

Roche, A. B. *Salesmanship for Women*. 1914. Ronald, N. Y. \$1.

WOOL

Cherington, P. T. *Wool Merchant. In his Wool Industry*, p. 58-74. 1916. Shaw, Chicago, Ill. \$2.50.

Congress and the Business Man

(Continued from page 42)

for practically the whole of the April issue will have been anticipated through sale of certificates.

To the end of January, the expenditures of the Government for all purposes, since the war began, were approximately \$26,500,000,000. In the same period receipts from taxation were around \$6,000,000,000. Thus, taxes met about 22.7% of expenditures. Bonds sold are in the neighborhood of \$17,000,000,000.

On February 13 the new Secretary of the Treasury set out plans for which he wished authority from Congress. He desires power to follow one of three courses: (1) to issue \$10,000,000,000 in bonds—of which five or six billion would be the Victory Liberty Loan; (2) to issue the \$5,000,000,000 in bonds for which authority already exists and to sell \$10,000,000,000 in short-term notes, or (3) an increase in the permissible amount of certificates from \$8,000,000,000 to \$10,000,000,000.

All of these plans might be used in succession. Certificates might be sold. At maturity

they could be refunded in notes running for a few years at relatively high interest. At maturity of the notes they might be convertible into bonds at a lower rate of interest in keeping with money markets as they then exist.

To enhance the attractiveness of the government's offerings in notes and bonds the Secretary makes several suggestions. He advances the British plan of having them payable at a premium at maturity, believing that subscribers would be influenced to hold their purchases and that new issues with this feature would not tend to affect the market for earlier issues so adversely as if the new issues were payable at par. He intimates that he might also follow England in having issues of two kinds, of which each subscriber could take his choice—bonds at a high rate but with interest subject to federal taxes and bonds at a low rate but free from taxation.

Holders of bonds in the earlier loans should, in the Secretary's opinion, get some new rights in connection with the new loan, even though all the bonds except the first loan, are now convertible. Those who subscribe to the new loan might obtain in addition exemptions from taxes upon their holdings of the old loans. As to the holders of \$866,000,000 of the 4% bonds of the second loan who did not exercise their privilege to convert, the Secretary renews his earlier recommendation that they have another opportunity.

Maturities of our war bonds now outstanding range from 1928 to 1947. Regarding the maturity of the April issue no clear intimation has been given, except that it will be short. It even seems possible that this issue will be in series, with a portion payable each year after twelve months from the proclamation of peace to 1927.

Peace Loans to Our Allies

AS the law now stands, our Treasury can make loans to allied countries only for war purposes. In December, the House Committee on Ways and Means was adverse to granting authority to extend credits through which allied countries may make purchases in the United States for reconstruction purposes. The Secretary of the Treasury now renews the recommendations of his predecessor in office. At the same time he suggests two limitations—that the credits be for only one year after the close of the war and that the total should not exceed the amounts already authorized for war purposes.

Without such help as is suggested by the Secretary, allied governments may not always be able to meet the interest payments due the United States on loans; these payments at present require \$200,000,000 every six months.

Government Backing for Exporters

IN another way the Secretary would make additional provision to meet the needs of allied and other countries in their purchases from the United States. He would authorize the War Finance Corporation to make advances to American manufacturers and merchants for the purpose of enabling them to extend long credits on their exports. Thus, purchasers in allied countries who have their resources so reduced as to hamper their buying in the United States would obtain the financial assistance that would make immediate transactions possible. The War Finance Corporation might, under the Secretary's plan, give aggregate advances of \$1,000,000,000. It would obtain funds by selling its own notes to the public.

In suggesting such legislation the Secretary's philosophy is that we cannot turn from our pre-war status of importers to our new role of

exporters with such alacrity as to permit the needs of allied countries to be met wholly through private channels, and we have not yet contracted the habit on a big scale of being investors in foreign securities. Hence, he sees a necessity, during the transition period, for governmental aid on the part of the United States if European allies are to get from us the food and materials they desire and which it is in our interest to sell to them.

That Big Wheat Crop

OF course, as guarantor to our farmers of a high price for wheat our Government already has a direct interest in foreign sales, as it must look to European countries for a market in which to place its wheat. The Food Administration is responsible for introduction in Congress of a bill which would not only appropriate \$1,000,000,000 with which to make good the guarantee but would also give the President power to keep other countries from meeting their needs for our meat products unless they took corresponding portions of our big wheat crop that is expected this year.

The "Informal" Contracts

ATTER being before Congress since early December, and on February 14 getting to the final stage before enactment, the bill which would permit the War Department to make adjustments and payments on contracts which were outstanding on November 11, and which the Comptroller of the Treasury says are "informal," was sent back to conference by the House.

Exception was taken to the scope of a section which was not a part of the original bill, but was added by the Senate. This section was intended to allow the Secretary of the Interior to settle claims ranging between \$4,800,000 and \$8,000,000 and made by persons who had responded to requests of different parts of the Government to make expenditures to produce here such important metals as manganese and chromium. Legislation enabling the Secretary of the Interior to encourage production of such metals had become law on October 5—so near the time of the armistice that little was done directly under it.

The remainder of the bill, which deals with contracts of the War Department, has been rewritten. It enables the Secretary of War to proceed to adjust all agreements made by his agents or upon direction of the President through such an agency as the War Industries Board. As to portions of contracts that are cancelled, prospective profits may not be allowed but remuneration on account of expenditures and liabilities may be paid. All claims must be presented before July 1. Subcontractors are given rights in protection of their interests.

A contractor who is dissatisfied with the settlement offered by the Secretary of War may take his case to the Court of Claims.

More Money for Country Roads

IN 1916 the Federal Government undertook to aid the states in construction of rural post roads. Under this legislation the sum of \$15,000,000 is available in the year which will close on June 30, 1919. The Senate added a rider to the Post Office Appropriation Bill which would enlarge the law of 1916, make \$50,000,000 available during the next four months, and \$75,000,000 in each of the following two years. These funds could be used for the construction of public roads that are used, or may be suitable for transportation of the mails, including

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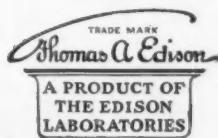
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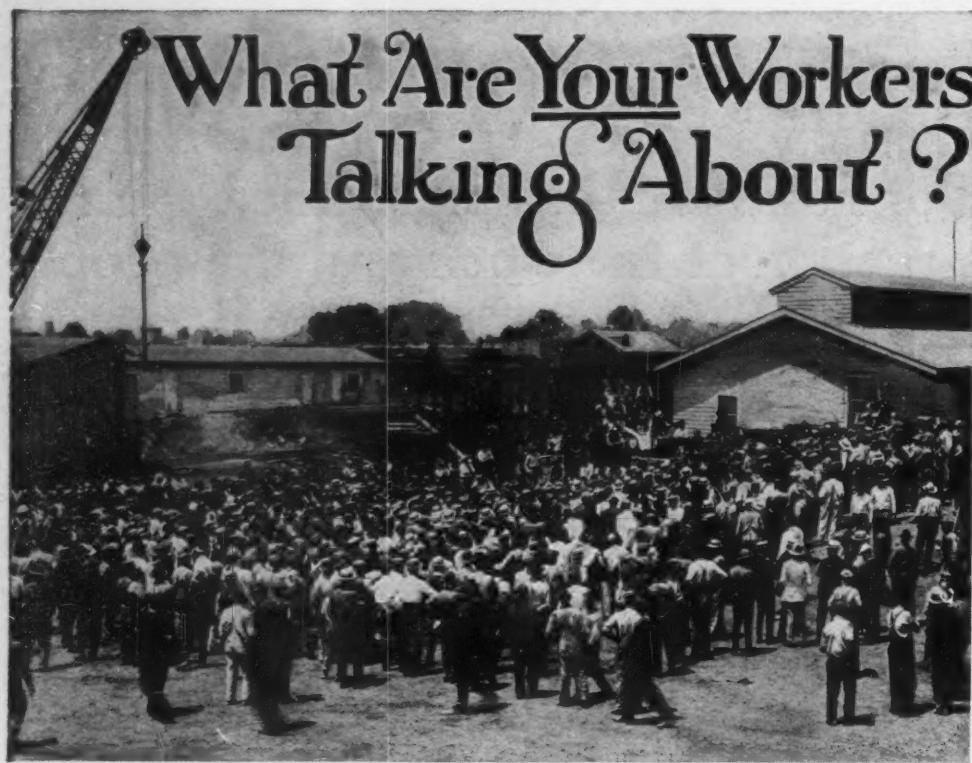
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FOR several years bills have been pending in Congress which would establish a system of leasing of public lands containing deposits of coal, petroleum, natural gas, phosphate and sodium. It is estimated that legislation on this subject will affect 35,000,000 acres of coal lands and 6,000,000 acres of oil lands.

Having passed both houses in different forms, a bill was reported by conferees on February 11. Accordingly, it is ready for final action by both Houses of Congress.

The Problem of the Packing Industry

THE House Committee on Interstate Commerce, which has been holding hearings regarding a bill which follows the recommendations of the Federal Trade Commission with respect to the meat packing industry, has indicated that it will make recommendations, on this subject before March 4. It is not likely, however, that legislation will be possible before the Congress ends.

Appropriation Bills

WHETHER or not there is to be a special session of the new Congress, in the spring, depends to a considerable extent upon the ability of the present Congress to pass all of the important appropriation bills before March 4. Much progress has been made with appropriation bills, but it seems probable that a number of important measures, possibly including those for the Army and Navy, will not become law in this Congress. Consequently, if there should not be a special session of Congress, important executive departments of the government would be without funds to support their activities after June 30, 1919.

Fostering the Thrift Habit

THE Governors of the twelve Federal Reserve Banks will conduct the 1919 campaign for the sale of War Savings Stamps and Thrift Stamps in their respective districts under the newly-organized Savings Division of the United States Treasury Department. In connection with the drive for the sale of stamps, the savings machinery in the various districts, with aid of the Savings Division, will carry on an intensive educational campaign to promote habits of thrift—wise buying, sane saving and secure investment.

Heads of industrial and business establishments have agreed to assist the Government in its Savings Program by forming war savings societies among their employees.

In the field each Federal Reserve Governor has designated a Savings Director who will take charge of organizing and developing Government savings societies, and will conduct the thrift campaign in his district. The Treasury, has reappointed for 1919 the 234,303 selling agencies which sold Thrift Stamps and War Savings Stamps during 1918. These agencies comprise banks, savings societies, and individuals. Information regarding War Savings Societies can be had of the local War Savings Director or by writing to the Government Savings Director, Federal Reserve Bank.

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Industrial Needs of France

(Continued from page 27)

ARRAS, the "chief place" of the Department of Pas-de-Calais, is a city that possibly may never be rebuilt. Before the war it numbered perhaps 30,000 inhabitants. It was not an important industrial center, but it was the seat of departmental government. It boasted a "grande place" and a "petite place" with a magnificent town hall—dating from the days of the Spanish occupation of Flanders—which annually attracted thousands of tourists to the city.

There is not a house in Arras that has not been damaged by shells. It was only with difficulty that the British troops had kept a passageway open in the streets because of the debris that continually slid down into them from the wrecked buildings on either side. At the time of our visit the French commandant told us that there were not more than a thousand civilians living in the town. The rest had departed with such of their belongings as they could carry and had temporary homes in other parts of France.

When the city of Arras is to be rebuilt it is difficult to say. French engineers in our party said that it would be necessary practically to raze the city to the ground before any reconstruction could be begun. And would it be justified, they asked, under the circumstances, with more urgent problems of reconstitution confronting France in other parts of the devastated region?

City of St. Quentin Sacked

THE city of St. Quentin affords another illustration of the impossibility of immediately rebuilding a badly shattered city. Before the war it was the industrial capital of the Department of the Aisne. It had numerous textile plants, printing establishments, foundries, machine shops, agricultural implement factories. Its population was about 50,000.

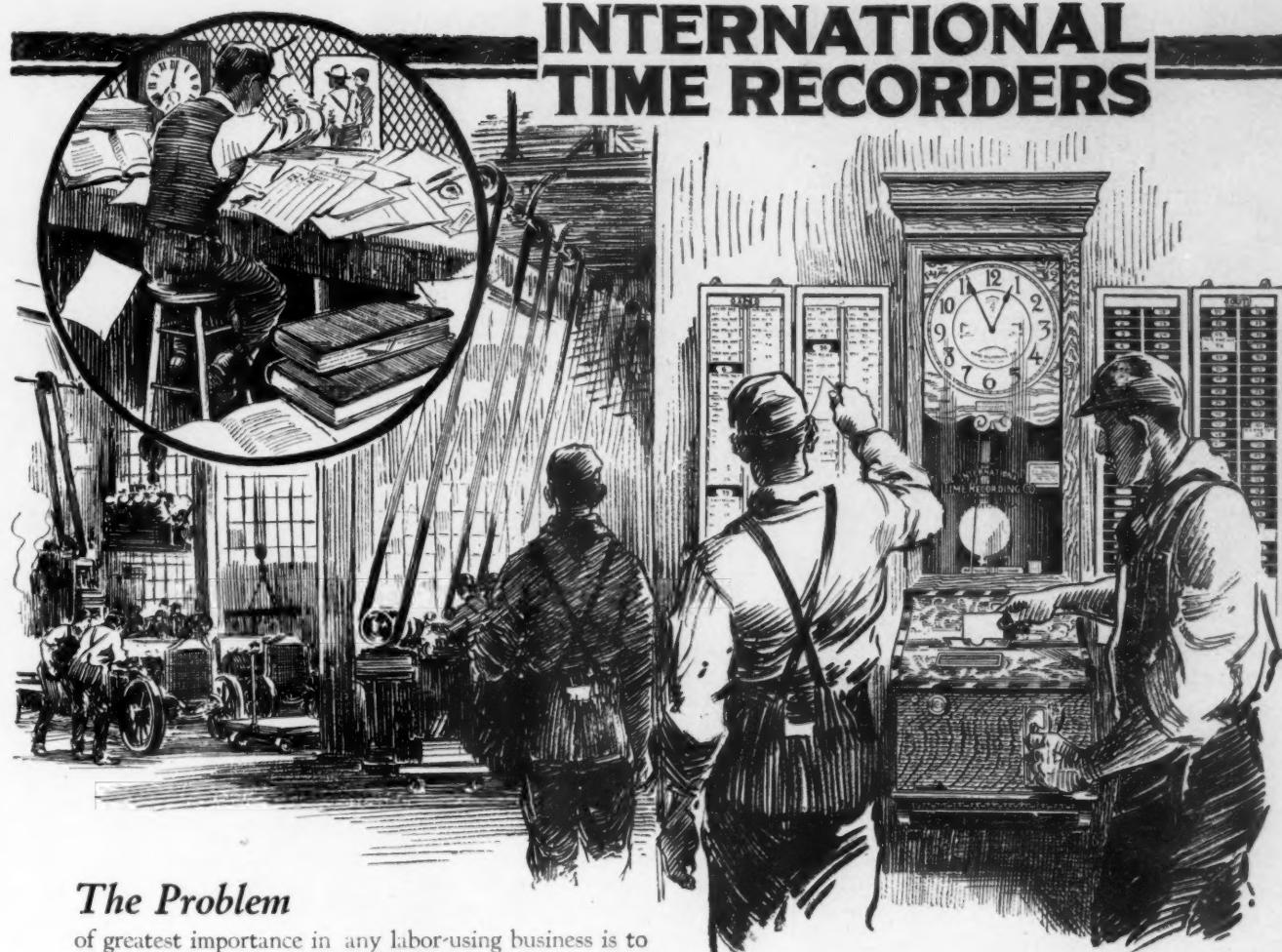
The cost of re-equipping the industrial plants of St. Quentin alone would run into several millions of dollars. But the destruction in the city is so universal that it may not be possible to do any restoration for some months to come. In any event the rehabilitation of the city must proceed very slowly, and as there is not a large civilian population to be taken care of immediately the reconstruction of St. Quentin may have to be deferred until more pressing problems are on the way to solution.

Cooperative Farm Associations

AMONG these more pressing tasks are the reconstitution of agriculture and the restoration of the coal mines.

In bringing the agricultural industry of northern France back to its former fruitfulness the use of modern farm machinery such as America produces so successfully will doubtless play an important part. The dearth of horses would seem to make the farm tractor absolutely indispensable. The shortage of labor likewise will make the use of labor-saving farm appliances desirable.

Here the peculiar position of French agriculture must be taken into consideration. It is said that there are more than 4,000,000 individual landowners in the country. This means that each farmer's parcel of land is small. The appearance of the French village indicates this. The houses are not built upon the occupant's own land, as in America, but are huddled around a church. Each peasant cultivates his little piece of land, which may be some distance from the village.



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The result of this system of small holdings is that the French peasant is not financially able to purchase expensive farm machinery. In the devastated region his difficulty is accentuated by the fact that such capital as he possessed before the war has been destroyed.

Therefore, in order to market any considerable quantity of American farm machinery in connection with the reconstitution of agriculture in the devastated section of France, account must be taken of the necessity for selling to cooperative associations among the peasants. Without some system of purchasing farm machines in common, it would seem difficult to build up a very large business in France. The French Government is alive to the situation and is assisting the formation of these cooperative farmers' associations. Farm implements may perhaps be purchased by the Government for distribution among the cooperative societies.

In certain sections, moreover, agriculture provides the raw materials of industry. The sugar mills of the Aisne are fed with beet root grown locally. It would be useless to rebuild the destroyed sugar factories before beet root could be produced by the peasants of the region.

Coal Mines Wrecked and Flooded

A BASIC industry, the reconstitution of which has already begun, is that of coal mining. The necessity for restoring to productivity the damaged coal mines of northern France is obvious. Coal is the food of French industry, for there is no water power in the north of France that can be utilized. Without coal it would be idle to reconstruct the damaged electrical power stations, and the resumption of life in the industrial establishments of the devastated region would be equally impossible.

The task of repairing the coal mines is in itself an enormous one. As stated above, a large portion of the coal-mining field was in the battle zone for four years. Not only were the surface works destroyed by gunfire but the deliberate dynamiting by the Germans of the concrete lining of the shafts resulted in flooding the underground workings.

Before there can be any thought of purchasing coal-extracting machinery for use underground, the mines must be pumped dry of water. This work alone may take a year in the case of certain mines. The French engineers hazard no guess as to the condition in which the underground workings will be found after the water is pumped out.

Probable Method of Placing Orders

THE impression I am attempting to convey in this article is that while the task of reconstitution is herculean in size, and while the assistance of American industry will undoubtedly be needed, the individual American manufacturer should be prepared to be patient with respect to actual orders.

When I left Paris for the United States the French Government was busy studying with the leading French industrialists and bankers questions of organization that must be solved before any considerable purchases can be made. The supply of credit, the granting of priority in shipping space for raw materials purchased overseas, and the best method of purchasing and distributing reconstruction goods were being discussed. According to information received from Paris by the Bureau of Foreign and Domestic Commerce, orders ultimately placed in the United States in con-



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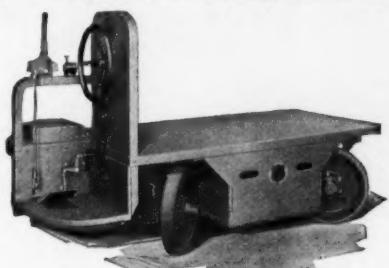
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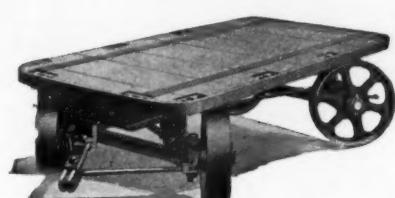
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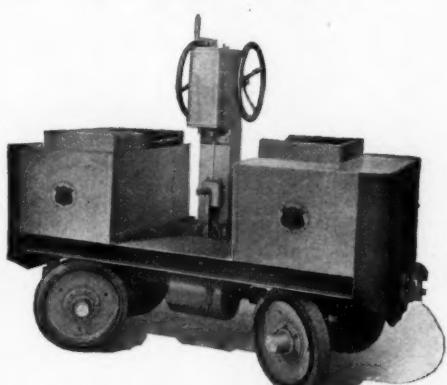
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REMEMBER THE DATE

The Seventh Annual Convention of the Chamber of Commerce of the United States will be held in St. Louis, April 29, 30 and May 1. It will take place just after the annual meeting of the National Foreign Trade Council at Chicago, and many delegates probably will attend both conferences.

**LE PAGE'S
CHINA
CEMENT**
STANDS HOT AND COLD WATER

nection with reconstruction will probably be handled about as follows:

They will originate in the Comptoir Central d'Achats Industrielles pour les Régions Envahies (the Government-controlled central purchasing office). It is presumed that representatives of American firms will treat directly with the engineers of this Comptoir, at least in a preliminary way. Orders tentatively approved by the Comptoir Central will be passed on to the so-called "Office de Reconstitution." This office was formerly a part of the French Ministry of Blockade and Liberated Regions, but was recently turned over to the newly created Ministry of Industrial Reconstitution. This department was formerly the Ministry of Armament, or Munitions.

When an order for goods to be manufactured in the United States is approved by the Ministry of Industrial Reconstitution it is understood that it will be transmitted by the Franco-American Bureau in Paris, of which M. André Tardieu is the chief, to the French High Commission in Washington.

French Factories to Make Material

A POINT to be given great weight by American manufacturers interested in selling reconstruction articles in France is the economic position of France itself. Everything that can possibly be manufactured in France must be turned over to French factories. It should not be overlooked that while there has been enormous destruction of industrial capacity in the north of France, there has been in many lines a counterbalancing expansion in the center and southwest of France. This is particularly true of factories that could produce any sort of munitions of war, from tanks down to fuses. These factories might find themselves unable to guarantee jobs to demobilized French soldiers unless they were assured of orders growing out of the restoration of the devastated region.

It is the task of the new Ministry of Industrial Reconstitution to see that these factories are converted into plants for peace. Inasmuch as the head of the new department is M. Loucheur, former Minister of Munitions, who until hostilities ceased controlled all French factories engaged on war work, it is safe to assume that French manufacturers will be given every opportunity to manufacture reconstruction goods.

America's Part Supplementary

TO sum up, it may accurately be said that America's part in the reconstitution of devastated France will be to supplement French efforts. First of all, we shall undoubtedly have to supply French factories with the raw materials that France does not produce. In the second place, we shall doubtless be called upon to fill in certain gaps which at present exist in French industries. That is, there will be many kinds of equipment which the French manufacturer will discover it is not economical for him to make in a plant which for more than four years has specialized in the production of something entirely different. If American manufacturers can demonstrate to the French industrialists the advantage of having certain machines, or parts of machines, made in the United States, while the French concentrate on things for which their industries are specially adapted, a business alliance permanently beneficial to both nations will result.

A new peace-time understanding is necessary with France—a fuller comprehension of the actual facts of her business.